ARI Discusses Certification . . . . . Pg. 15

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'Professional Look'

ARW Drive To Emphasize Proper Business Procedure

By Frank J. Versagi

CLEVELAND — "Our *New Look* theme has been effective, has made an impact; without diluting its effectiveness, we are switching the theme to the *Professional Look.*"

Thom Muir, executive vice president of Air Conditioning & Refrigeration Wholesalers, told the NEWS that the New Look campaign was designed with two major purposes in mind: 1) to promote the importance of the wholesaler's role to the manufacturers and to the industry in general; 2) to attract non-ARW wholesalers to membership.

The Professional Look will take cognizance of the fact that today's wholesaler must concentrate on his business procedures if he is to make a reasonable profit in the price-cost squeeze which is now common to all industries and businesses.

"During the days when his business was growing rather rapidly, managerial inefficiencies and errors failed to show up on the growth curve. Now that the growth curve for most businesses has leveled off considerably, such weaknesses in management break through and show up plainly," offered Muir.

Muir feels that one indispensable prerequisite for efficient management of a business is statistics, knowledge of how one's operation compares to industry averages and highs and lows. Early ARW attempts to obtain statistical information from members, however, met with failure. Muir feels the reason for the reluctance of members to submit data was "the uneasy feeling that even though it was promised that returns would be treated confidentially,

(Continued on Page 4, Col. 3)

'Total Electric' Modernization Program Set

MUNCIE, Ind. — The Muncie area has been selected by Westinghouse Electric Corp. for the pilot test of an extensive "total electric" home modernization program.

"Of the cities of this size which were analyzed," said W. H. Loeber, manager of the Westinghouse residential marketing department, "Muncie offered the best combination of good economic conditions, active public interest, electric utility support, and high quality local distributors and dealers."

Participating with Westinghouse in the three-month program are the Muncie firms of Modern Electric Co., on kitchens and appliances; Climate Control Corp., all types of electric heating and cooling; and Doyle's of Indiana, baseboard electric heat-

(Continued on Page 4, Col. 5)

Inside Dope

By GEORGE F. TAUBENECK

Learn to live and laugh — thus delay your epitaph

To the Dubious Contractor In Dubuque

Let's say you are a contractor in Dubuque. You neither import nor export. What's all this hullabaloo about world trade got to do with you? Probably more than you suspect.

One reason is that the United States needs imports vitally—we rely completely on foreign suppliers of tin, aluminum, natural rubber, coffee, oil, nickel, platinum, manganese, and many other commodities.

That's why we must export. A nation can't have *imports* without *exports*—one pays for the other. As Roger Fairchild, a Yale university economist, puts it: "The imports are the end, the exports the means."

Big difference between what a nation brings into its environs and what it sends overseas is called "balance of trade." However, the "balance of payments" situation is another matter.

In 1960, when our imports were at an all-time high, the balance of trade was in our favor—as it's been since 1875. The value of our exports was $4 billion *more* than the cost of our imports.

Yet the balance of payments —what we owed to foreign countries—was *not* in our favor. Reason: We gave away $8 billion in foreign aid, tourist travel, and for overseas military defense.

So we owed foreign countries $4 billion. That's why gold—the international form of money

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How Los Angeles Judges Equipment For Installation

By George M. Hanning

LOS ANGELES — An explanation of how the city of Los Angeles determines acceptability of air conditioning and refrigeration equipment for installation in the city was given the NEWS recently by Glenn M. Schlegel, mechanical engineer in the city's Mechanical Bureau.

The explanation came in response to a NEWS query arising out of reports that Los Angeles was no longer accepting Underwriters Laboratories listings on air conditioning and refrigeration equipment, but was making its own determinations of proper ratings for code enforcement purposes.

"This is not true," Schlegel declared. "We do accept UL listings on air conditioning and refrigeration equipment when

(Continued on Page 4, Col. 1)

CRMA Members See Slightly Better Second Half; Note Rise In Inventory Turnover

CHICAGO—Devoting a major part of their annual meeting here to an analyses of the industry's progress in 1961, plus a diagnosis of the industry's well-being in the form of a "balance sheet" that listed its bad as well as its good features, members of the Commercial Refrigerator Manufacturers Association concluded that their business is still a pretty good one, providing individual manufacturers have the gumption to help clean up an assortment of ills that have interfered with profitable operations in recent years.

With reference to immediate prospects, the "forecast" panel foresaw a slightly better second half of 1961, predicting an overall increase of 3 to 5%, as compared to the combined industry gain of 1.7% for the first six months. Robert L. Tyler, Sr., Tyler Refrigeration Corp., a member of the forecast panel and also chairman of the association's government relations committee, stated that on the basis of his committee experience, he was of the opinion that despite widespread rumors that the government might set up price and wage and possibly even production controls, this was not

(Continued on Page 21, Col. 1)

Aerovox Capacitors, Resistors Covered By 2-Yr Warranty

NEW BEDFORD, Mass. — Aerovox Corp. announces that a two-year warranty is now in effect on its capacitors and resistors sold through all industry markets.

The company claims that this is "the first major change in product warranty made by a manufacturer of these components in recent years."

This change, Aerovox said, "has been made in recognition of customers' needs, and as a result of advancements made in

(Continued on Page 21, Col. 5)

Air Diffusion Council Formed By Manufacturers

CHICAGO—Formation of Air Diffusion Council, a new trade association in the air distribution field, has been announced.

The council is incorporated under the laws of the State of Illinois.

Members of the association manufacture grilles, registers, ceiling diffusers, air flow control equipment, and terminal air control devices.

One of the prime objectives of the new group is to develop an industry-wide testing and rating standard for use by industry, government, architects, engineers, heating contractors, and building contractors.

The association will also encourage basic research into the scientific laws governing the behavior of air streams in enclosed areas.

Substantial progress has been made in outlining testing and rating standards during the period immediately preceding formation of ADC, the council

(Continued on Back Page, Col. 4)

NLRB Announces Defense Job Rules Changes

WASHINGTON, D. C. — The National Labor Relations Board recently.

- Announced rules changes to speed up its handling of labor jurisdictional disputes at missile sites and other defense establishments.
- Declared that the awarding of superseniority to replacements of strikers and to strikers who returned to work during a strike is an unfair labor practice.
- Ruled that union members may pass out handbills at business places of employers not involved in a strike even when the employer being struck is not a manufacturer.
- Reaffirmed its decisions that a supervisor who held union office and voted in union elections was interfering in the internal affairs of the union as proscribed by the National Labor Relations Act.

Under the new NLRB policy which became effective Aug. 15, it will be possible to hold hearings in jurisdictional disputes at missile sites and defense establishments 10 days after the filing of charges.

The changes in rules of procedure also eliminated briefs by the parties involved except on good cause shown to the board.

"Superseniority," the board said, "is a form of discrimina-

(Continued on Back Page, Col. 1)

MODERN INSTALLATION & MAINTENANCE PRACTICES

Next week's NEWS will survey current installation and service practices on such diverse items as:

BURNOUTS OIL BURNERS EVACUATION
ELECTRICAL TESTING SUPERHEAT

165,000 Sq Ft Plant

Anemostat Production, Research Facilities Moved To Single-Level Plant In Scranton

NEW YORK CITY—All Anemostat production and research facilities have been moved to a new single-level, 165,000-sq ft plant in Scranton, Pa., C. T. Roff, president of Anemostat Corp. of America, a subsidiary of Dynamics Corp. of America, announced recently.

This modern plant will enable Anemostat to produce air diffusers, high-velocity air distribution equipment, and "Anemotherm" air meters with maximum efficiency, Roff said.

The new, modern engineering center of 10,000 sq ft has complete facilities for radiated sound power measurement of air flow and temperature equalization.

Three main chambers to provide reverberant room for sound measurement through all frequency bands and a Monitor Master Panel Board for recording and controlling all conditions throughout each chamber are employed.

In addition, the Research and Development Laboratory is equipped with a climatic test window for demonstrating and testing all heating and cooling problems and a hydraulic-electric moveable floor for varying floor to ceiling heights.

Anemostat's new address is 888 N. Keyser Ave., Scranton. General Sales Offices will remain in New York, but will move to 25 W. 43rd St.

Trane Profits, Sales Up for First Half

LA CROSSE, Wis.—Increases in consolidated sales and profits for the first half of 1961 compared to the first half of 1960 were reported by The Trane Co. here.

For six months ending June 30, sales were $51,637,589 with a net profit of $2,964,889. This compares to 1960 first half sales of $48,191,559, and profits of $2,587,795.

Second-quarter sales were $28,002,369, and net profits $1,647,109. This compares to 1960 second-quarter sales of $28,529,109, and net profits of $1,785,026.

Second-quarter sales and profits in 1961 were adversely affected by a seven-week strike of production workers at the Canadian subsidiary, the company said.

Air Conditioner Sales Up In Southern, Northwestern and Midwestern Areas

DETROIT — Air conditioners were selling at a brisk pace in the territories served by Florida Power & Light Co., Miami, and Pacific Power & Light Co., Portland, Ore., according to reports from the utilities.

A third report, from the Electrical League of Cleveland, showed that room air conditioner shipments in Cuyahoga County by league member distributors for July were up 35% from a year ago and that shipments of central residential systems gained 14%.

However, another report, from the Federal Reserve Board, was not encouraging for the industry. In its quarterly survey of consumer buying intentions, conducted in the third week of July, the FRB reported that 1.1% of the families interviewed expected to buy an air conditioner in the next six months, compared with 2.6% in April and 1.4% in July last year.

Miami

Florida Power & Light reported that at the half-way mark in the four-month (May-August) air conditioner and fan campaign, a total dollar volume of $3,604,950 had been reached.

This was 35% more than the volume at the mid-point in last year's campaign and was 61% of this campaign's goal, or 11% over quota to date. Air conditioners hit 62% of quota, with sales of 12,320 units.

FPL said that in view of these results "and with that good old Florida sunshine continuing to pour down, this promises to be a really big air conditioning year."

Air conditioner sales in the FPL territory in June totaled 7,588, compared to 5,663 a year earlier. For the first six months of 1961, sales amounted to 28,-284 against 20,666 in the like 1960 period.

The FPL report shows unit sales to retail dealers as reported by state wholesalers and also sales by department and chain stores and some retailers who purchase their merchandise from sources other than state wholesalers.

Portland

Frank M. Reis, general sales manager for Pacific Power & Light Co., said June sales of room air conditioners by dealers in communities served by PP&L hit an all-time peak under the pressure of warm weather and public acceptance of the units. He added that indications pointed to a high level of sales during August.

For example, tabulations from the Portland area showed that 178 units were sold in June, compared to 42 in June, 1960. For the first six months of 1961, Portland sales rose to 221 units from 97 a year ago.

Water heaters, electric dishwashers, and waste disposers had shown increases, but none as great as that for room air conditioners. All other categories on a system-wide basis were down for the month and also for the first six months.

Cleveland

In the Cleveland area, distributors shipped 940 room air conditioners in July, compared to 698 in July, 1960. Shipments of central residential systems rose to 50 from 44 a year earlier.

However, for the first seven months of this year, room unit shipment were off 8%, dropping to 5,127 from 5,858 in the like 1960 period. Central system shipments also were down for the January-July period, totaling 210 compared to 304, a decline of 31%.

NEWS readers are invited to write to the editor giving their opinions on any subject of interest to the industry.

KRAMER **UNICON**

WAY OUT IN FRONT and deservedly so!

KRAMER's largest UNICON has 50% more capacity than any other! ▶ New, all aluminum casing ends rust and corrosion. Stands and structural steel are galvanized after fabrication. ▶Time-tested WINTERSTATS prevent low receiver pressure and insure start-up under any weather condition.

Available with horizontal or vertical air flow. Lowest silhouette. ▶ Kramer's UNICON is so quiet it can be used in unlimited multiples. ▶ No one can match Kramer's 20 years of accumulated know-how in air-cooled condensing and no other air-cooled condenser can match the Kramer UNICON—the pioneering leader in the industry.

WRITE FOR BULLETIN

KRAMER TRENTON CO./Trenton 5, N. J.

46 YEARS OF CONTINUOUS ACHIEVEMENT IN HEAT TRANSFER

Export Opportunities

Specific Requests from Around the World Listed

WASHINGTON, D. C. — Export trade opportunities in Burma, Venezuela, Germany, Hong Kong, Netherlands, France, and Sudan were reported recently by the Business & Defense Services Administration (BDSA), U. S. Dept. of Commerce.

In **Burma,** Man Yadana Trading Co., Ltd., 142/144 Bogyoke St., Rangoon, wholesaler, retailer commission agent, and importer, is interested in direct purchase of an agency for air conditioners and air coolers of the following specifications: household—230 volts, 50 cycles, ½-2 hp; autobomile—6 and 12 volts.

In **Venezuela,** Otoniel Mancilla "Repuestos de Refrigeracion," Edificio Amadora, Avenida Roosevelt, Apartado 7661, Caracas, importing distributor, wants an agency representation for parts and accessories for domestic, commercial, and industrial refrigeration equipment.

In **Germany,** Eugen Steinbrueck, Grossnaumarkt 45, Hamburg 11, importing distributor and manufacturers' agent, is interested in direct purchase of and an agency for air conditioners (220 a.c., 50 cycles) for homes.

Also in **Germany,** Rudolf Knies, 3 Mercedesstrasse, Stuttgart-Bad Cannstatt, manufacturers' agent, would like to secure an agency for industrial air conditioning units.

In **Hong Kong,** British General Electric Co., Ltd., P. O. Box 15, Union House, importing distributor and manufacturers' agent, is interested in direct purchase of room air conditioners from ¾ to 2 hp, air conditioning plants for big buildings, and domestic refrigerators from 8 cu ft up.

Three firms in **Netherlands** are interested in direct purchase of U. S. equipment. The firms and the equipment desired follow:

Zephry Koel- en Luchttechniek, N.V., 3-5 Industrieweg, Zoetermeer, manufacturer — compressors to be used for the manufacture of refrigerating equipment.

N. V. Technisch Bureau Marijnen, P. O. Box 1001, 52 Walderpstraat, The Hague, importing distributor—a complete line of "comfort and air conditioning equipment."

Wilro Koeling, N.V., 156 Goudsesingel, Rotterdam, importing distributor, manufacturer, installer — refrigerating and air conditioning compressors in capacities from 1,000 to 100,000 calories (without evaporators, which are made by applicant himself) and water-cooled condensers.

In **France,** Societe Industrielle et Commerciale du Cuivre, 25 Bld. Richard Lenoir, Paris, lle, manufacturer of electrolytic copper and exchangers, seeks American licensing rights on special finned coils for industrial exchangers and air coolers, particularly for the oil industry.

This firm stated that in addition to its electrolytic installation at Sevran, it operates a plant at Wingles (Pas-de-Calais) for the manufacture of exchangers (air conditioner type) and low pressure industrial equipment. It also has a warehouse at Aubervilliers.

The corporation is capitalized at $413,280 and reportedly does an annual volume of business of approximately $3,200,000. Its staff includes 250 employes.

The BDSA also reported that it has been advised from Paris that in accordance with a previous decision, quantitative restrictions on the importation of refrigerators and refrigerating equipment were removed on June 15, without additional action by the French Government.

In addition, the BDSA said it has been informed that there is a good potentional market in **Sudan** for cold storage facilities and food freezing equipment.

"The United States trade with the Sudan has risen in the last year," the report noted. "It apparently can continue to rise if aggressive selling and sales follow-up methods are used.

"The Sudan is now a rapidly expanding market though still small. The Sudanese have an appreciation of quality and innovation.

"Some American goods may be at a disadvantage to some extent due to higher costs and freight rates, but it appears this disadvantage could be offset by proper sales techniques and the introduction of American products new to the Sudan. Credit facilities and 'turnkey' or 'package plants' are important in making sales in the Sudan."

Reading Rocky's Room Units

Governor's Bid for Presidency Revealed by Choice of Air Conditioners, Politico Says

NEW YORK CITY — After studying air conditioning plans for the state's executive mansion, Rep. Samuel Stratton of New York announced that he knows Gov. Rockefeller intends to run for President in 1964.

Stratton said the Governor would have ordered a central air conditioning system installed in the mansion if he had the slightest intention of spending much time in Albany if he is re-elected in 1962.

"Instead," Rep. Stratton said, "the individual room air conditioners are a dead give away that the Governor plans only an infrequent overnight stand in Albany in the course of his nationwide travels to try to beat out Sen. Barry Goldwater for the Republican nomination."

This prompted *The New York Herald Tribune* to comment in an editorial headed "The Slightly Cloudy Air Conditioner":

"For generations mankind has been foretelling the future in cards, crystal balls, tea-leaves, fortune cookies, and drugstore scales. But to read a man's mind in his air conditioner is a feat that transcends all. One can't help wondering what else lies under Representative Stratton's turban these warm summer days."

NEWS readers are invited to write to the editor giving their opinions on any subject of interest to the industry.

not in the valves

DAVISON PA®400 SILICA GEL keeps your coils dry, reduces moisture to less than 10 ppm . . . eliminates the possibility of ice forming on the expansion valves. Maintains full flow filtration constantly. Davison PA400 Silica Gel supplies high no-bypass filtering efficiency without softening, swelling, or breaking up. Write Dept. 2603 for further information and the PA400 technical bulletin.

GRACE
DAVISON CHEMICAL
Industrial Chemicals Dept. 2608
Baltimore 3, Maryland.

Los Angeles--

(Continued from Page 1, Col. 3)

it is identified as listed.

"There seems to be a trend, however, in combining heating units with heating and cooling coils in the same cabinet enclosure. These we accept provided the furnace unit bears the approval label of the American Gas Association or of the Underwriters' Laboratories, and further provided that working spaces, accesses, and openings to the combustion area, etc., comply with the minimum requirements of the code.

"We have had those in which the furnace unit was approved by American Gas Association or by Underwriters' Laboratories but in which the assembly did not meet with our code requirements for working space, openings to the combustion area, etc. In these cases, we require that they be approved by us prior to installation.

"Recommendation for approval is generally based on a study of detail assembly drawings, photographs, and evaluation of the labeled equipment in relation to complete assembly.

"Our code requires that air ducts be constructed of metal. Where air ducts are constructed of material other than metal, we do not accept Underwriters' Laboratories listings as a full basis on which to approve such material but subject them to certain minimum tests or examinations of our own and review tests by approved independent laboratories as a basis on which to evaluate a recommendation for approval by the Board of Building and Safety Commissioners."

NEWS readers are invited to write to the editor giving their opinions on any subject of interest to the industry.

ARW To Emphasize Business Procedure--

(Continued from Page 1, Col. 2)

some member of the board or visitor in the ARW office, might see the information."

To overcome this fear, ARW has contracted with the Wharton School of Finance, University of Pennsylvania to handle statistics for the association. To begin with, members will be asked for only their monthly gross volume and its comparison to a year ago.

As part of the Professional Look, too, Muir sees sales seminars and courses on credits and collection, "three or four of these a year co-sponsored or held jointly with manufacturers and wholesalers."

Only a few years ago, according to the ARW vice president, the average wholesaler did about half a million dollars business with a very few people. Today's average member does three-quarter to a million dollars business and needs 10-15 employes to do the job. "A few years from now, the *survivors* will be those who became professional businessmen," Muir predicts.

Both as part of the New Look and as transition to the Professional Look, ARW inaugurated a program involving the mailing of a series of letters to 1,300 manufacturers. The first four letters also went to prospective members of ARW.

Each letter is from the regional director of a different ARW region. The letter comments on one of the 12 points cited on the back page as reasons manufacturers should do business with ARW members. The inside spread of the four-page letter carries a montage of the letterheads of all the ARW wholesalers in the director's region and carries a note on the availability of the complete directory from the ARW office.

The twelve points:

1) Economical and experienced distribution centers
2) Present your products best
3) Continually contact your customers and prospects
4) Are there when it counts
5) Know who makes the Buying Decisions
6) Have specialized know-how to sell equipment and supplies
7) Greatly eliminate credit problems
8) Constantly multiply your advertising dollar
9) Give you constant growth —40 wholesalers in 1935—500 today
10) Greatly reduce shipping, warehouse, selling costs
11) Covers the entire nation's trading areas
12) Provides stability.

"From each mailing, we receive 30-40 letter replies from manufacturers, and by word-of-mouth we hear repeatedly that the letters have been effective," stated Muir.

After the series of 12 letters is sent, a 13th will be sent from the ARW office here summarizing the program, he concluded.

Electric Homes--

(Continued from Page 1, Col. 1)

ing and insulation.

As an indication of the interest in modernization already shown in Muncie, the Westinghouse executive pointed out that in 1958, 8% of all electric heating installations in Muncie were modernization jobs, the remainder being new homes. In 1959 the figure had climbed to 32%, and last year 76% of all such installations were modernizations.

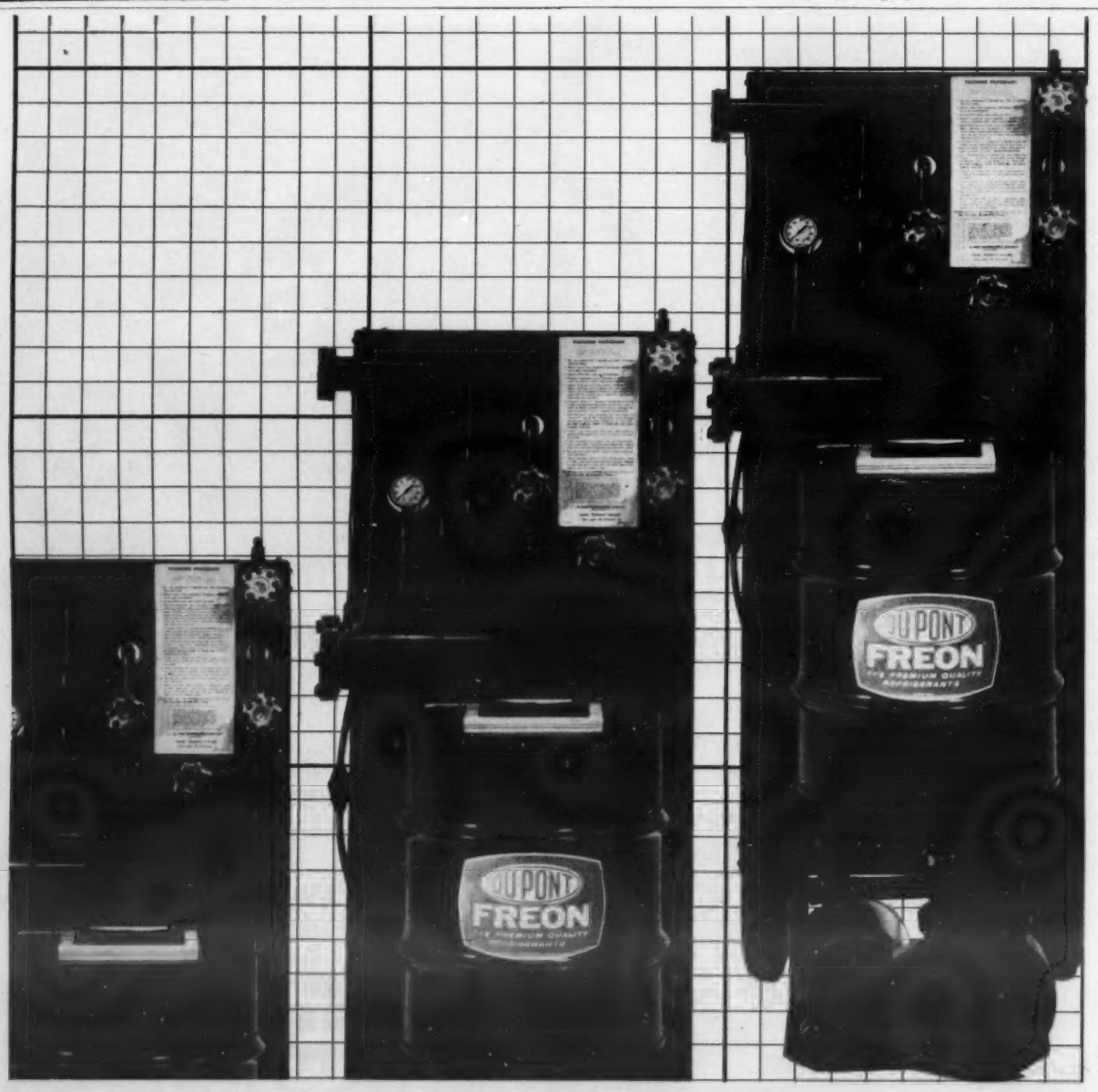
Loeber said the program was timed to closely follow the passage by Congress of the Federal Housing Bill.

"One of the most important features of the bill," he said, "permits the FHA to guarantee long-term financing for complete remodeling and modernizing of existing homes.

"This kind of 'new-home-type' financing will permit a family to remain in its established neighborhood and yet have the comfort and convenience of the most modern kitchen and heating system in their present homes."

The Westinghouse campaign will focus public attention on complete soundly financed home modernization by reputable dealers, according to Loeber. Modernization programs such as the Muncie project, he added, include virtually every phase of home living — the kitchen, laundry, lighting, wiring, heating, and air conditioning.

In addition to electric baseboard heating units, Loeber said there are Westinghouse electric furnaces and heat pumps available for modernization projects as well as built-in appliances, Micarta counter tops, and Bryant wiring devices and load centers.



RAISE PROFITS

with this new Du Pont power-cleaning unit for burnouts

Call-backs on refrigeration burnout jobs can run up costly hours of non-profit service time. Now, however, you can help eliminate costly call-backs by doing a thorough cleaning job the first time—with a new power-cleaning unit designed by Du Pont. This new unit does the job not by replacement or simple flushing, but by thorough recirculation. It uses Freon-11*, the most effective selective solvent available for oil, sludge, or grease.

Complete burnout cleanup can be accomplished quickly and efficiently in just eight short steps with this practical, mobile unit. And when you recharge the system, you'll find Du Pont's improved lightweight "Zephyr" cylinders make that job a whole lot easier, too.

To increase your profits and improve your reputation for dependable service, use this cleaning unit for burnout jobs. Ask the helpful air conditioning and refrigeration wholesaler near you who sells "Freon" for all details.

FREON® premium quality REFRIGERANTS

DU PONT

BETTER THINGS FOR BETTER LIVING...THROUGH CHEMISTRY

*FREON and F- followed by numerals are Du Pont's registered trademarks for its fluorocarbon compounds.

QUALITY... EXPECTED AND DELIVERED. Enjoying the best is not necessarily a luxury—certainly not in compressors and condensing units. For Bendix-Westinghouse units provide "luxury" quality at competitive prices—as any of our customers will attest. You can *expect* the best in performance and dependability from any model in our line—with full confidence it will *deliver* exactly that quality to you. To see how we back it up, turn the page.

Bendix-Westinghouse MOTOR COMPRESSORS

BENDIX-WESTINGHOUSE BACKS YOU UP WITH STRONG FIELD SUPPORT

Certainly, you'll agree. Next to product quality—few factors are more important to a manufacturer of refrigeration equipment than service support from his supplier. Here's the strong field support program Bendix-Westinghouse offers:

▲ **OVER 200 AUTHORIZED WHOLESALERS FROM COAST TO COAST:** This means—no matter where your customers are located, no matter where your installations are made—an authorized Bendix-Westinghouse wholesaler is close at hand.

▼ **COMPLETE ON-THE-SPOT REPLACEMENT INVENTORIES:** Our nation-wide wholesalers' network maintains complete inventories of motor compressors, condensing units, and replacement electrical components.

▲ **EXPERIENCED ENGINEERING AND APPLICATION ASSISTANCE:** Available from our regional managers located in major cities throughout the U. S. and Canada. These representatives use modern instruction devices and are well-qualified either to render on-the-job assistance or to conduct educational meetings.

Our field support is just one more reason why Bendix-Westinghouse is your best buy in motor compressors and condensing units. Get full details today.

Bendix-Westinghouse

EVANSVILLE, INDIANA

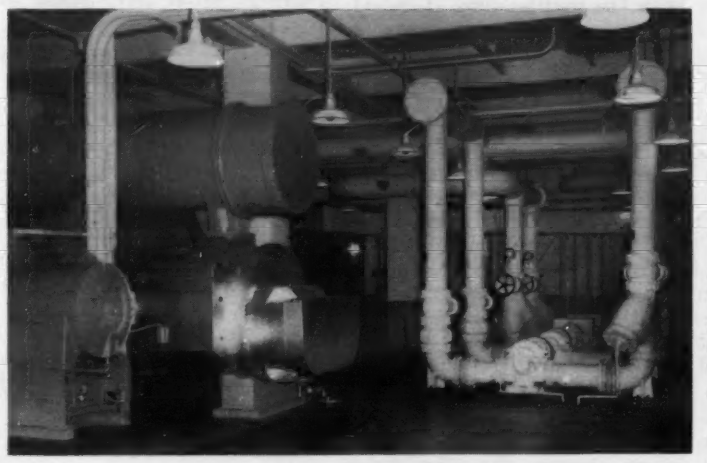
A Division of Bendix-Westinghouse Automotive Air Brake Company, Elyria, Ohio

Export Sales: Bendix International, 205 E. 42nd St., New York 17, N. Y.; Peter A. Karl, Inc., Union Station Bldg., Utica 2, N. Y.; Sabal-Kielmann, Inc., 15 William St., New York 5, N. Y.

Year-Round Cooling Needed To Offset Heat From Equipment In Communications Center

LOS ANGELES — At Pacific Telephone's new $31,000,000 "non - heated" communications center here, 743 tons of refrigeration will do the cooling chore for the 180,000-sq ft structure.

The building is believed to be the first of its kind in the West to be designed without heating equipment at all (except for a few electric strip heaters)—as the internal equipment load will be of such magnitude to require continuous cooling year-round.



LEFT: Equipment room will accommodate a second 750-ton chiller when needed, in support of a 750-ton Carrier hermetic centrifugal now serving as core of the refrigeration system.

RIGHT: The third floor utilizes a bank of two Drayer-Hanson H-Series air conditioning units totalling 48,300 cfm with an ultimate capacity to 64,000 cfm.

A 13,200-ton capacity Fluor cooling tower serving the new building is installed in the complex atop an adjoining building, and was so positioned because the new structure will eventually rise to 17 stories.

A 750-ton Carrier hermetic centrifugal chiller serves as the core of the cooling operation.

George Miller was Pacific chief engineer on the $6,000,000 project. Woodford & Bernard, AIA, were architects. Air conditioning contractor was Key Air Conditioning Co., El Monte. Representing Drayer - Hanson was its Los Angeles sales representatives, Air Conditioning Supply Co.

Equipment Heat Emission Will Hit 5 Million BTU

By the next year, heat emission of PT&T equipment alone will be approximately 5 million Btu, according to a report by Drayer-Hanson Div., Hi-Press Air Conditioning of America, Inc.

This new eight-level steel and concrete structure is part of a tri - building communications complex. According to James S. Cantlen, vice president and general manager of Pacific Telephone, the facility will make up the world's largest concentration of switching apparatus.

"These buildings will be crossroads, not only for customer-dialed long distance calls," he said, "but for local and eastern television programs, microwave-radio relay, telephoto, ship-to-shore phone calls, mobile telephone, teletypewriter, data processing, and the new dataphone service which is finding increasing use today by business."

Manufacturer-Ready Fan/Coil Units Used

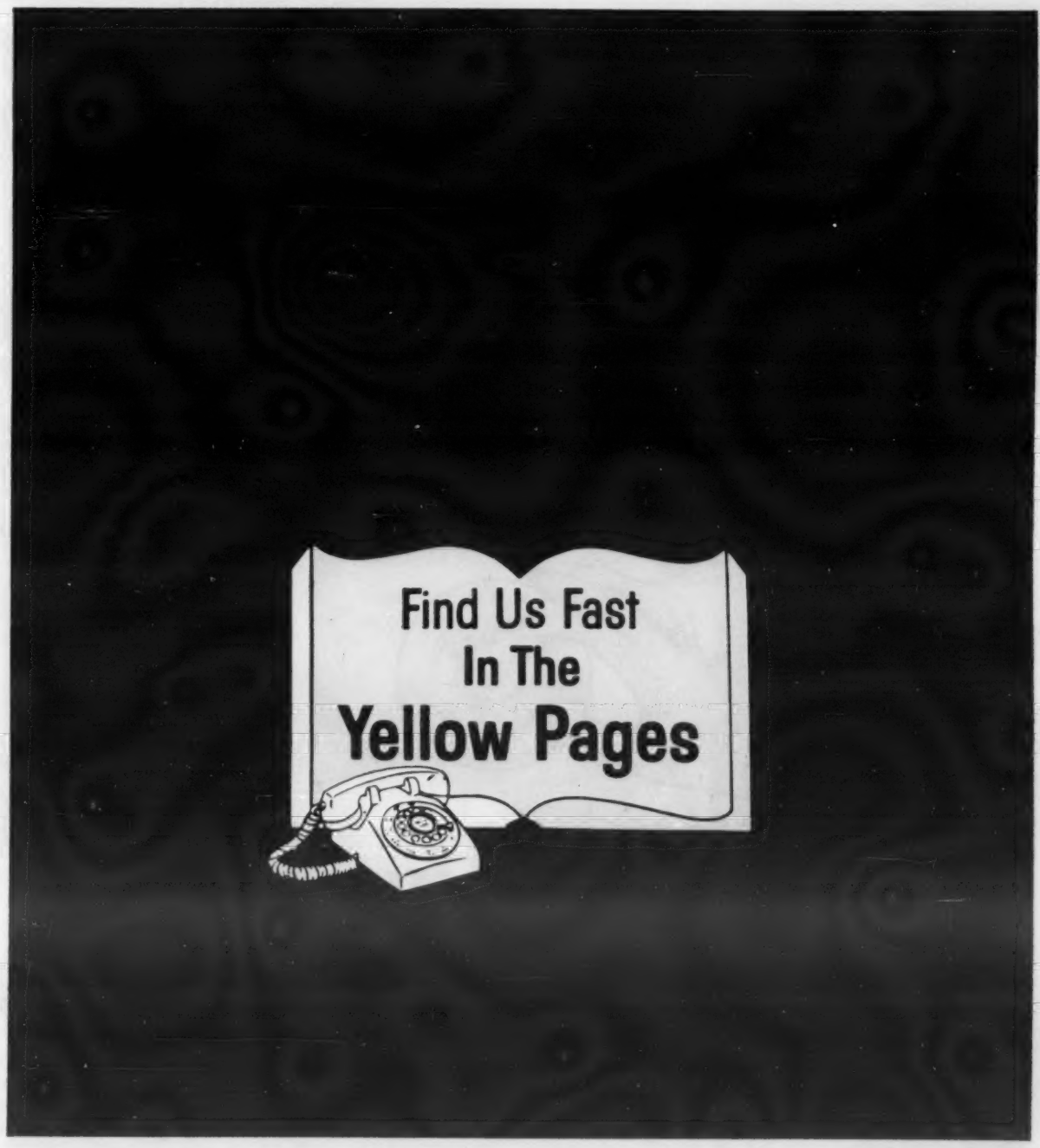
Rather than a built-up air conditioning system, project mechanical and consulting engineer Lester A. Kelly, here, selected manufacturer-ready fan/coil units and positioned them on every floor in their own equipment rooms.

Plus the economy of space, it was decided on this floor-to-floor unit flexibility, in case of breakdown, the report noted. The air distribution design was coordinated with all telephone heat equipment so there would be no interference, with distribution essentially overhead.

Typical in the installation is the basement, 2nd floor level, where converter room, transmitter room, switchboard, and telephone equipment space is utilizing a single Drayer-Hanson H-Series air conditioning unit, with 15,400 cfm, 5 tons cooling capacity. Cooling coils only are included; none for heating.

The third floor utilizes a bank of Drayer units totalling 48,300 cfm, with ultimate capacity of 64,000. Twelve-in. pipe, chilled water supply, and return risers supply all units. The ninth floor of the building has three Drayer-Hanson floor-positioned air handlers, totalling 90,750 cfm—an extremely high load for a single floor of a building, according to Kelly engineers. Air change on this floor approximates 20 changes of air per hour.

All floors are interconnected to emergency power, enabling units to operate in the event of power failure.



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By GEORGE F. TAUBENECK

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This deficit obviously must be reduced by an increase in United States exports.

Grandfather Did It

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"New markets for our goods and services are emerging in the developing areas which are now joining the world community of free nations.

"Also the traditional foreign markets offer challenging opportunities as a result of their growing economies and the elimination of restrictions affecting American goods."

Many American firms in our industry were 'way ahead of President Kennedy. Years ago they established beachheads on foreign shores.

And today, they're collecting astoundingly on those investments. Moreover, the future for foreign trade is stratospheric.

Taxpaid Assistance

The U.S. Department of Commerce reports that many foreign countries are easing import restrictions, quota licensing, and tariffs which previously handicapped American businessmen.

This department also is working with foreign countries to increase tourism here; it is providing information to American businesses that do export, and it is promoting trade fairs abroad which exhibit our exportable products.

Foreign trade provides more direct employment in the U.S.A. than the textile, auto, chemical, and steel industries combined, according to the International Council of the Chamber of Commerce.

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Query: What have these 13 Americans in common?

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Henry Wilson
Schuyler Colfax
Levi P. Morton
Charles W. Fairbanks

Answer: All of these obscure fellows were Vice Presidents of the U.S.A.

Verse of the Week

Tax his cow, tax his goat,
Tax his pants, tax his coat.
Tax his tractor, tax his mule,
If he hollers, tax him more.
Teach him taxes is the rule.
Tax him 'til he's good and sore.
Tax his coffin, tax his grave,
Tax the sod where he's laid.
When he's gone, we won't relax,
We'll be after inheritance tax.

Stories of the Week

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"How come you talk so much?" he blurted out to his date.

"My mother," she confessed, "told me I'd never get into trouble if I kept on talking every minute."

Excitedly a space scientist announced:

"There are teen-age girls on the Moon! Our communications satellites always get busy signals from there!"

Add Newspaper Boners

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She said she is anxious to go to set "because that's where the Navy's mission really is."—*Tampa Tribue.*

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Adlai's Off To Peru After Night of Rioting.—*Miami News.*

The two-headed youngster and his mother hugged and cried as they saw each other in the police station for the first time in six years .— *Buffalo Courier-Express.*

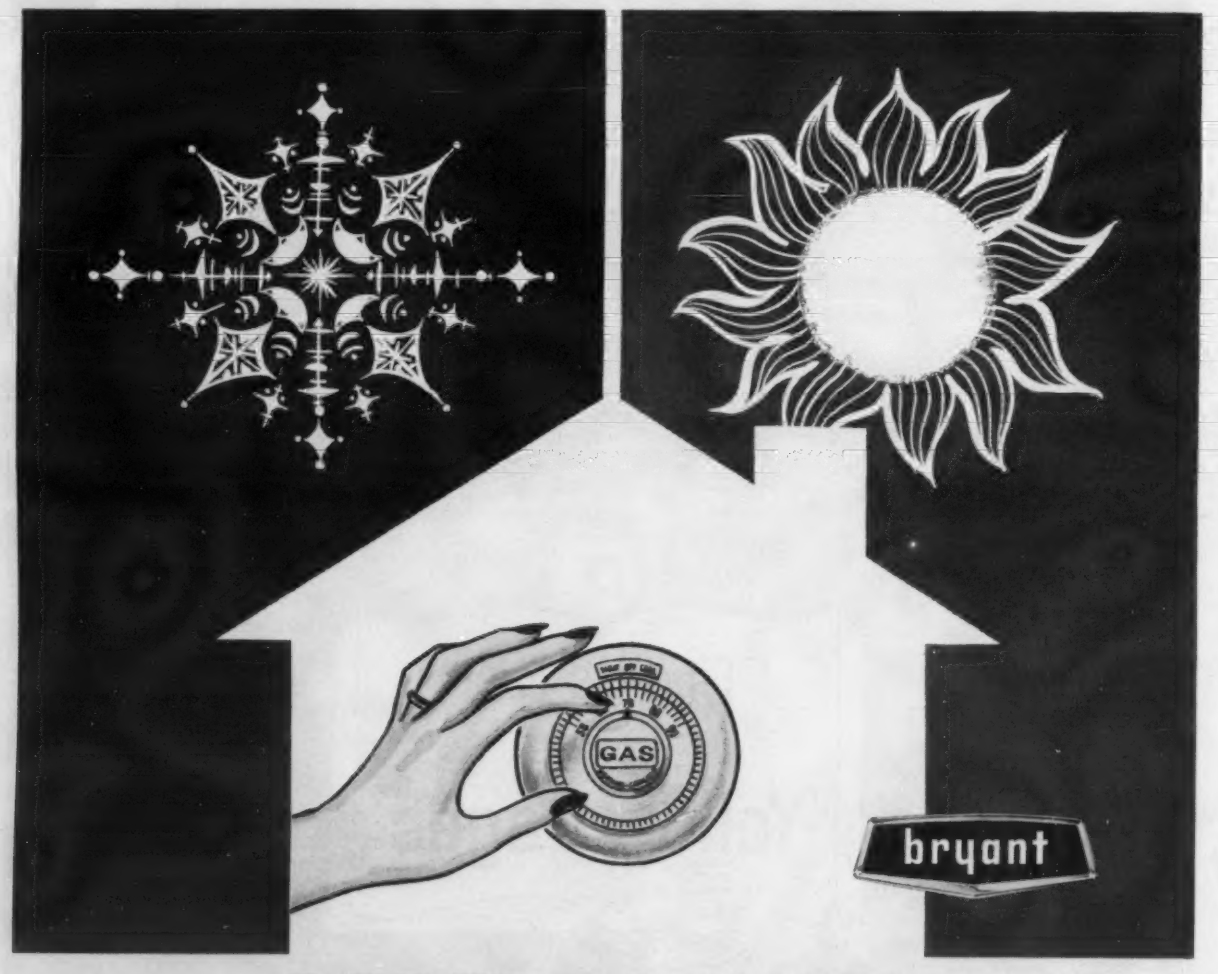
The extra $1.50 above the price of the ticket for a reserved chair apparently does not dissuade a score of beach-bound wee-enders from requesting reservations.—*New York Times.*

Thoughts for the Weekend

There is one basic quality that will determine our success or failure more decidedly than any number of college degrees, or any amount of training for a specific job can possibly do. That quality is *personality.*—FRANCES PETERSON.

Recreation can open doors that no other activity of our life can . . . expands our horizons to make our world include new people, new settings, new enjoyment. Every time we branch out into a different activity, we add another dimension of excitement to our lives.—ROBERT D. SISCO, *Education.*

If men could be induced to laugh more they might hate less, and find more serenity here on earth. If they cannot worship together, or accept the same laws, or tolerate the wonderful diversity of thought and behavior and physique with which they have been blessed, at least they can laugh together.—MALCOLM MUGGERIDGE.



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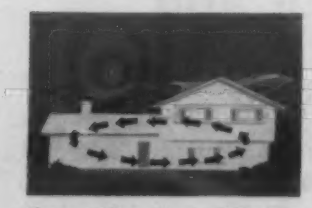
And a Bryant Gas air conditioning system is *truly* dependable.

Because it's Gas, weather will not disrupt service, especially on hot, hot days when it's needed most. Because it's Gas, neither you nor your customers will be bothered with excessive costs, excessive maintenance. For example, a Bryant add-on Gas cooling unit installs outdoors, uses no high amperage wiring, no valuable floor space, no water tower. And, because it's Bryant, you are backed by a company with over 50 years experience in home comfort . . . now a leader in air conditioning.

Bryant Gas air conditioning can be depended upon to furnish *whole* house comfort—all year round. And *nothing* cools more comfortably, more quietly, than Gas. Ask your Gas company for details. AMERICAN GAS ASSOCIATION



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"The result is that in the manufacture of the multiglass units maximum cleanliness is maintained, and with the humidity removed from the air that is pocketed between the glasses, the risk of condensation forming after the units are in use, is eliminated.

"Another portion of this new building, which is adjacent to the metal fabrication department, houses a new 'Detrex' degreasing system. Here the steel frames of all display cases, after they have been welded, are immersed and completely pickled and degreased preparatory to being finished with rust-resistant coatings. This operation assures maximum adherence of the coating materials.

"The steel frames are then ready for the application of the exterior sheets of acid-resistant porcelain-clad steel, and the stainless steel interior liners.

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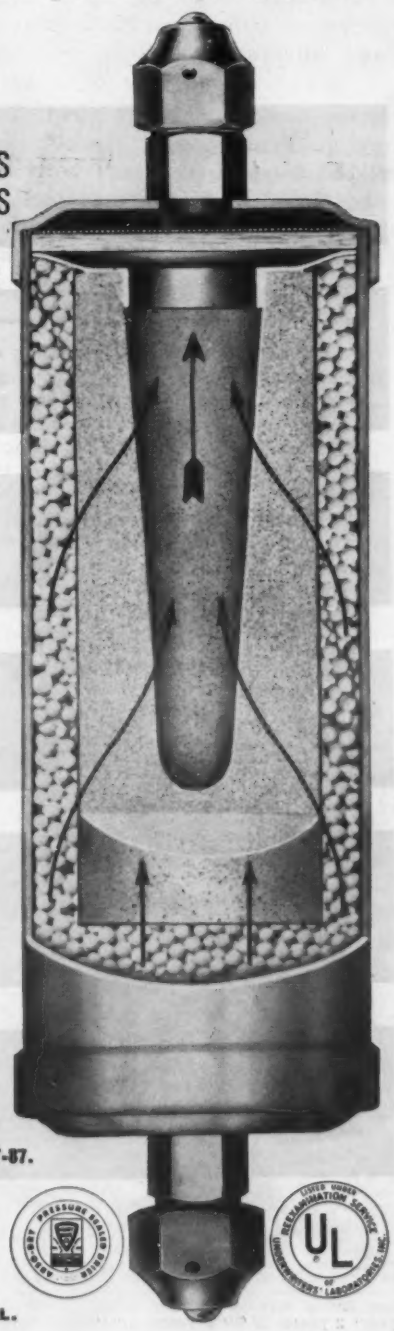

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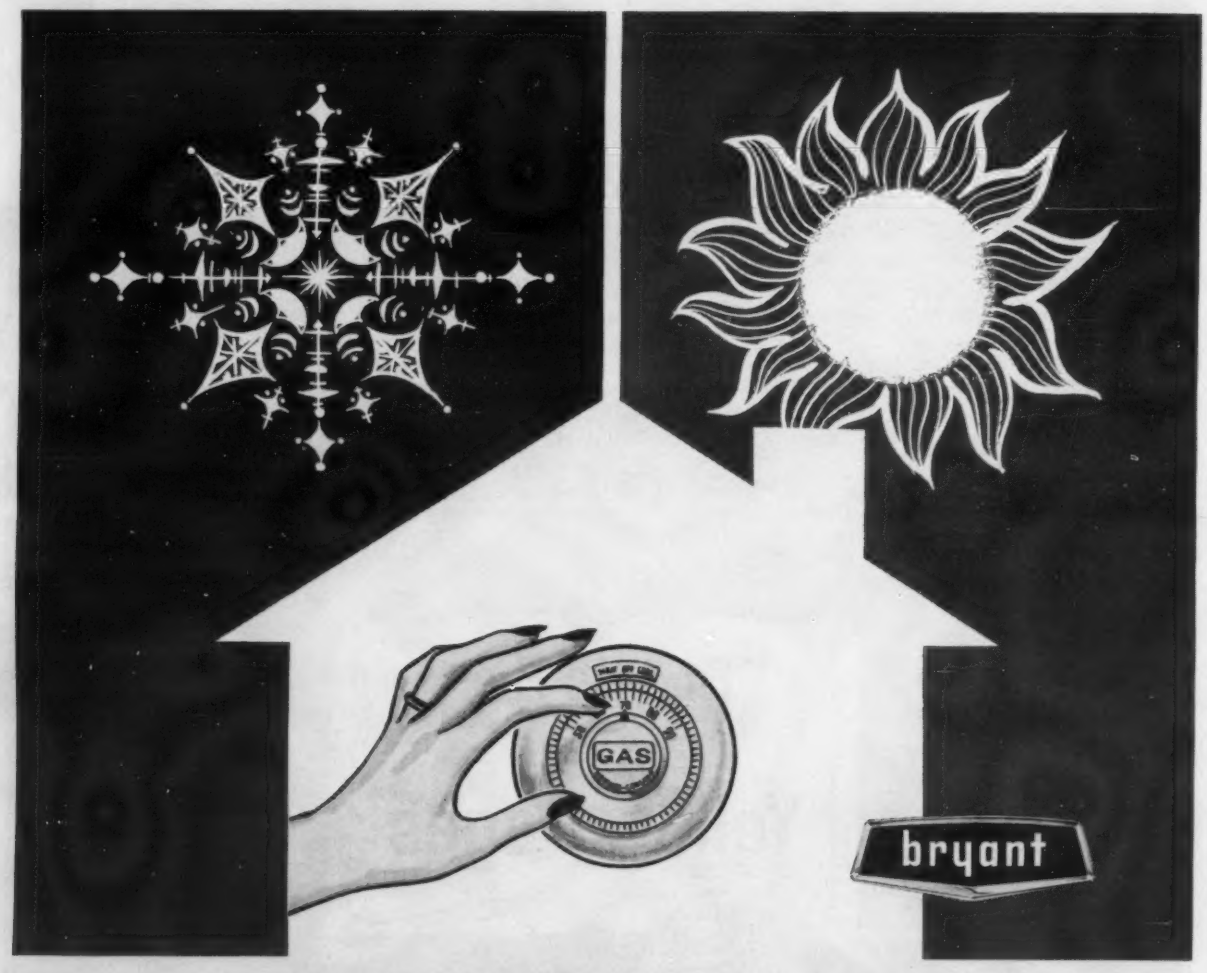

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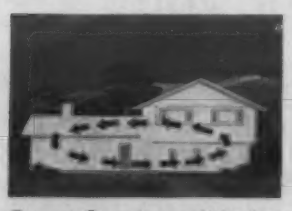

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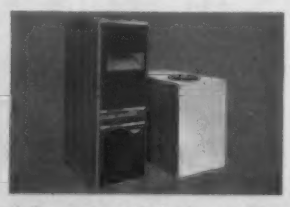

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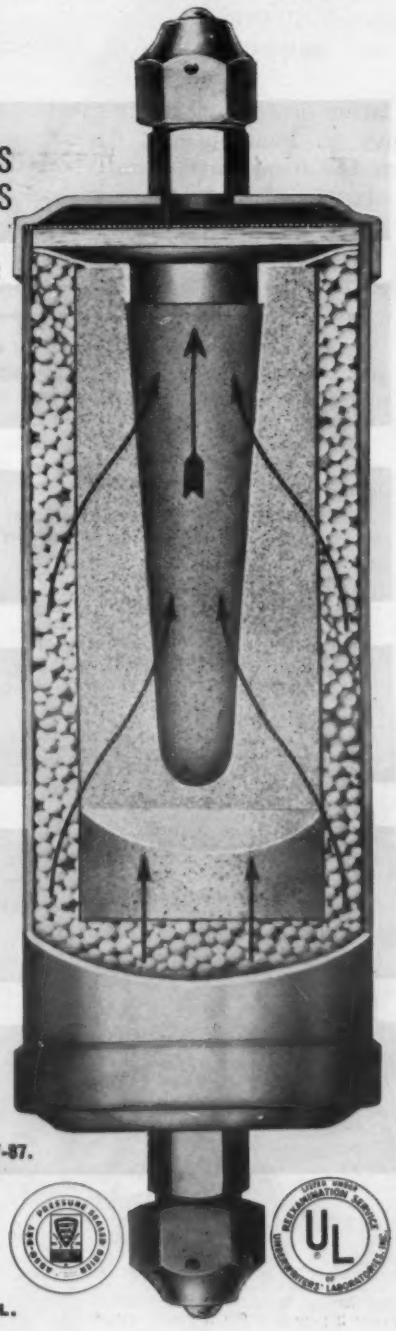

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Editorial

Service Manpower Source: High School Dropouts

AT LEAST 900,000 teen-agers are hunting unsuccessfully for jobs at this moment. And their numbers are bound to increase within the next few years.

Legislation to ameliorate this situation, submitted to the House Committee on Education and Labor, has been proposed by Kentucky's Rep. Carl D. Perkins. Purpose: to help teen-age boys and girls qualify for jobs.

It would provide "methods for effective utilization of the production potential of untrained and inexperienced youths . . . to meet current and future technological requirements of an expanding labor market . . . and to give the nation tested training and work experience programs for school dropouts and other youths who will need work in increasing numbers during this decade."

Competent and conscientious craftsmen—air conditioning installers, auto mechanics, electricians, pipefitters, refrigeration servicemen, etc.—are as essential to our society as are lawyers, architects, doctors, bankers, and commercial enterprisers.

Hopefully, a pool of recruitees for such jobs is available—the lads who aren't "college material." Many of them don't finish high school. Others are flunked out of colleges and universities in their freshman year.

The latter deserve encouragement. Too often they go home utterly discouraged. Moreover, too many high school boys become disheartened because they had to struggle for a "C" academic average, can't make college, and feel they are just bums.

Plenty of these lads have natural aptitudes for skilled mechanical occupations. They should be encouraged to seek apprenticeship in some established trade (like auto air conditioning repair work).

Otherwise they are in danger of kissing off their futures, hanging around street corners, and ending up in trouble.

Mayor Miriani of Detroit has written the House Committee on Education and Labor to wit:

"Due to Detroit's 15% over-all unemployment, with more than half of the adult unemployed in unskilled and semi-skilled classifications, Detroit's youth face particularly barren prospects. The opportunities for employment that do exist require a high degree of skill and training.

"Detroit's young people most seriously hit are minority youth, early school leavers, and those high school graduates who have no particular skills or academic ability to offer prospective employers.

"From 1955 to 1960 there has been a 55% loss of jobs for Detroit 16 and 17-year-olds. During the first five months of this year there has been a further loss of 30% over the comparable months of 1960. Most serious has been the 70% drop in the employment of high school graduates through these five months."

Almost every employer of mechanical technicians—from garage owners to air conditioning contractors and refrigeration service operators—is short of "help," sometimes occasionally, often chronically.

Recruiting and training potential installers and servicemen from high school "dropouts" and collegiate flunkouts might help solve this daily-more-pressing problem.

Determination can be a blessing and a virtue when it leads a man to confront and overcome obstacles and discouragement.

Determination becomes a curse and a vice when it so blinds a man that he refuses to change direction when it has become obvious he is on the wrong road.

History is full of great men who were steadfast and singleminded; history is also full of men who become great after — in mid-life — they realized they were in the wrong business and changed course.

A man owes it to himself to try; he owes it to himself and his loved ones to know when he is attempting to exceed his talent and ability. The decision is a hard one.

But it must be made.

(From a letter by NEWS Editor Versagi to a discouraged aspiring writer.)

* * *

We must treat ideas somewhat as though they were baby fish. Throw thousands out into the waters. Only one handful will survive but that is plenty.—*Forbes*

SAME THING EVERY ISSUE—"A MAGAZINE OF AND ABOUT THE EMPLOYEES," IT SAYS—SO EVERY PAGE IS ABOUT BIGDOME AND MORE BIGDOME ···
BILGEWATER BEVERAGE CO.
THE BOWLING TEAM WINS THE LEAGUE CHAMPEENSHIP—AND THEY DON'T GET A MENTION ····
HERE'S A SQUIB ABOUT V.P. AXEMAN—HOW'D THAT GET IN? 8 TO 5 HE WON'T BE WITH US LONG!
PHOOTKISS, THE PUBLIC RELATIONS MAN WHO BREWS THIS MISHMASH, HAS BIGDOME BUTTERED UP LIKE HOT RAISIN BREAD!!
WHY DO THEY CALL IT A HOUSE ORGAN? IT ONLY PLAYS IN BIGDOME'S KEY···
OUR LEADER MAKES A HOLE-IN-ONE
the BILGEWATER BABBLER
BIGDOME GIVES ADLAI ADVICE AMENT U.N.
BIGDOME FEEDS STARVING SKUNK
GREAT MAN BEGINS HUMANITY CRUSADE
PUT UP WITH BIGDOME ALL DAY AND THEN READ ABOUT HIM ALL NIGHT····
THANX AND A TIP OF THE HATLO HAT TO FRANK A. EVENDEN, RR4 BOX 524, NEWTON, N.J.
7-11
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They'll Do It Every Time

by Jimmy Hatlo

OUTSIDE INFLUENCES USING 'STRIKE PRIVILEGES'

J. Lawrence Hall Co., Inc.
Nashua, N. H.

Editor:

In your July 24 issue of the NEWS you had an editorial entitled "Good News From Harvard." Your compliments were to E. Robert Livernash, Professor of Business Administration at that university.

This editorial was of particular interest to me because I was privileged to be a representative to the Methodist New Hampshire Conference at Harvard recently. About 100 clergy were in attendance to witness a subject which Dr. Livernash was very well qualified to present.

The presentation was the result of a five-year study by Dr. Livernash. The disturbing part was that "strike privileges" were not always beneficial to the participants. They are being used to gain a strangle-hold upon our commerce and industry by outside influences such as you have indicated.

These influences often are played down as only imaginary, a red herring, etc., and it couldn't happen here! It is, and has happened here among union pressure groups.

J. LAWRENCE HALL

PRIVACY OF A CLOSET

Whirlpool Corp.
Evansville, Ind.

Editor:

As chairman of the Air Conditioning Symposium in which you participated during the Denver ASHRAE meeting, I have had many unsolicited telephone calls commenting on the caliber of the speakers and subjects. As you well know, Frank, from your position on the NEWS, it is very easy to find people who will speak their mind in the privacy of a closet, but it is far more difficult to find people to speak out.

Thus, it was extremely gratifying to know that you had a message for the engineering society and, most important, that you were willing to tell them.

W. R. MOLL

ARTICLES DIDN'T CLARIFY — THEY STIMULATED

Tyler Refrigeration Corp.
Niles, Mich.

Editors:

Your articles on air conditioning supermarkets were very good. Even if they didn't clarify, they certainly stimulated interest and thought. That, of course, is very beneficial since it makes people aware that there definitely is a problem.

A composite statement as you suggest would be beneficial; however, it could only take the form of "Air conditioning in food stores must take into consideration the needs for controlling humidity as well as temperatures."

Such a statement could probably be supplemented by comments to the effect that humidity is best controlled by providing means of controlling the air conditioning coil temperature so that the coil temperature will not be excessive even during low air conditioning demands. Regardless of the design conditions and the size of the system in relation to the total heat load, maintenance of proper coil temperatures will succeed in controlling humidity.

Additionally, proper calculations of heat loads for any type of refrigeration application would demand consideration of both heat gain and heat rejection from the area to be refrigerated.

Many thanks for what appears to be an excellent service to the trade.

ART PEREZ,
Chief Administrative Engineer

* * *

Editor's Note: In addition to his technical comments, Mr. Perez made a valid observation which deserves a little comment; he recognizes that one of the functions of the NEWS is to place before its readers a summary of information dealing with subjects about which there is disagreement in the industry. It is not always possible or desirable that the NEWS, itself, should take a stand on such disagreements; nevertheless, it is our function, our obligation, to present the varying viewpoints for our readers' evaluation.

AIR CONDITIONING HEATING & REFRIGERATION NEWS
F. M. COCKRELL, Founder

'The Conscience of the Industry'

GEORGE F. TAUBENECK, *Publisher*
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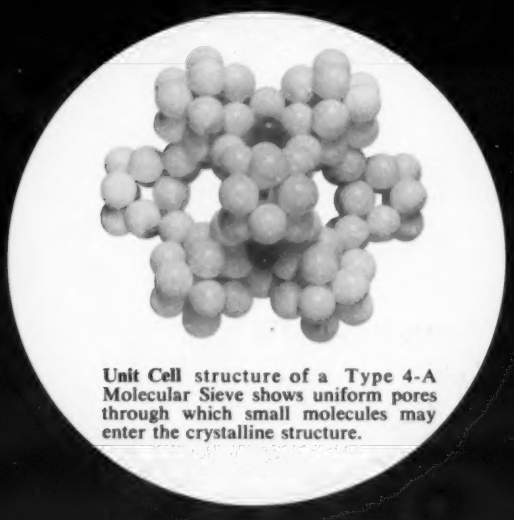
More efficient drying, filtering and acid removal with

DETROIT

molecular sieve filter driers

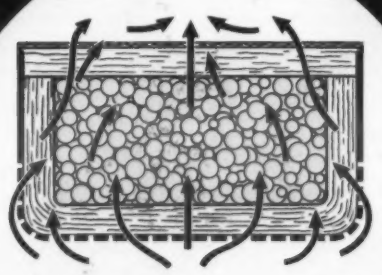
Detroit filter driers are available in many different types—are rugged, compact, highly efficient. They can be used with R-12, R-22 or R-500 and keep the refrigerant perfectly filtered while holding moisture and acid concentration within safe limits with a minimum of pressure drop. Molecular sieves remove and retain up to 20% of their weight in water at 140 F or higher, holding moisture concentrations in the refrigerant to 10 ppm or below.

Tests show that molecular sieves have three times the capacity of conventional desiccants when used under similar conditions.

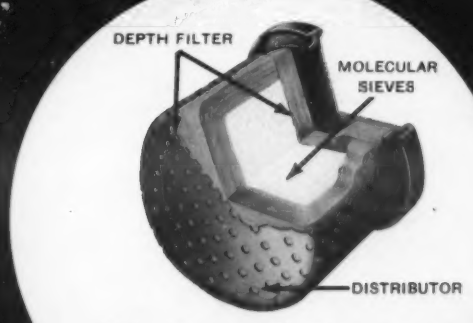


Unit Cell structure of a Type 4-A Molecular Sieve shows uniform pores through which small molecules may enter the crystalline structure.

An extra thick filter of fiber glass completely surrounds the molecular sieves. Particles as small as 10 microns are trapped in this filter.



A distributor directs the refrigerant flow through the filter and the large-diameter, short-travel desiccant bed.



Molecular sieve filter-driers do not absorb oil or refrigerant—reduce acid concentrations to well below dangerous corrosion limits.

© Copyright 1961 by American Radiator & Standard Sanitary Corporation

DETROIT molecular sieve filter driers

are available in a wide range of sizes in three types

sealed type

This type of Molecular Sieve Filter Drier is compact, yet has three times the capacity of other filter driers. It works equally well in hot machine compartments or refrigerated areas. Generous wrench flats are provided on flare-type filter driers. Sizes range from ¼" through ⅝" SAE flare and ¼" through 1⅝" O.D. sweat. They are U/L listed and have a minimum bursting pressure of 2500 psi.

Extended Sweat Connections

Standard Flare Type Connections

adapter type

For maximum installation convenience adapter type Molecular Filter Driers can be removed and replaced easily without disturbing line connections. The Detroit adapter fitting has a built-in moisture liquid indicator. It remains in the line permanently and the filter drier is simply screwed into the fitting. Line size ¼" SAE through ⅝" SAE and ⅜" through ⅝" O.D. U/L listed with a minimum bursting pressure of 2500 psi.

replaceable cartridge type

Detroit flanged shells have an "O" ring flange seal which provides a simple, positive means of achieving a leak-proof joint with a very nominal torque on the cap screws and with no flange distortion. The design is such that the "squeeze" on the "O" ring is limited. Thus, the flange may be removed and resealed many times without replacing the "O" rings. Available with mounting brackets for shell diameters of 3", 3½", 4". U/L listed with minimum bursting pressures of 2500 psi. Cartridges must be ordered separately.

DETROIT DRI-DOT

indicators give positive moisture liquid-control

With the Detroit Dri-Dot Moisture-Liquid Indicator one glance tells if the system is dry and fully charged. An extra large, optically clear magnifying sight glass is fused into the body providing a hermetic seal. The highly reflective interior reveals the tiniest bubble in the liquid. The sensitive element reacts quickly in the presence of moisture and indicates relative dryness of the refrigerant. A blue dot indicates "dry", pink says it's "wet", pale blue or light pink indicates "caution." The indicator is equally sensitive to R-12 and R-22. Maximum working pressure is 500 psi; bursting pressure, 2500 psi minimum. Detroit Dri-Dot Moisture-Liquid indicators are available for ¼" through ⅝" SAE and ¼" through 2⅛" O.D. line sizes.

AMERICAN-Standard
CONTROLS DIVISION

Noisy Air Conditioners

Flutist Seeks End to Nuisances 'with a Musical Note Of a Second A above Middle C, with a Clunk'

SHOREWOOD, Wis.—An end to noisy nuisances "that have a musical note of a second A above a middle C, modulated by a clunk" was demanded at village hall here recently.

The noisy nuisances so described are air conditioners.

The demander is Harvey A. Uber who based his description on his experiences as a flute and piano player, as a former teacher of acoustics at the old Wisconsin State college, and as the next door neighbor to an air conditioner that runs 24 hours a day.

"These noisy air conditioners are like putting a man in prison and giving him the water treatment, except the sound is different," he complained.

He brought along a decibel meter. On the meter, the offending air conditioners — checked over a three-week period at locations here and in nearby Whitefish Bay and Milwaukee— registered at least 73 decibels, Uber claimed.

He said ear specialists told him that 80 decibels are difficult to withstand and 85 decibels are injurious.

Village Manager Robert W. Duncan agreed that air conditioners had a peculiar noise of their own. He said that he has been working on an ordinance to check noisy air conditioners, but was having difficulties.

"Octaves and high frequency levels have to be considered," Duncan told the village board. "Conditioners just make a different noise that can't be measured by a decibel meter."

Valve & Primer Names California Hydronics

SAN FRANCISCO—Valve & Primer Corp. of Chicago has appointed California Hydronics Corp. here manufacturer's representative for its "Apco" and "V-Apco" silent check valves in northern California and Nevada except Clarke County.

In addition to this new line, California Hydronics represents Bell & Gossett Co., Klipfel Valves, Inc.; Modine Mfg. Co.; U. S. Flexible Metallic Tubing Co.; and Weksler Instruments Corp.

It was also announced that Orville E. Stucker has been appointed sales engineer for California Hydronics in northern California and Nevada except Las Vegas, with headquarters at the Sacramento Builders Exchange. Stucker recently left the Sacramento office of American Air Filter Co.

Flexible Tubing Opens St. Louis Sales Office

ST. LOUIS—Flexible Tubing Corp. has opened a sales and engineering office at 9216 Clayton Rd. here.

The office is the 11th regional sales and engineering office maintained by the company. F. Richard Krabbe, senior sales engineer for the company, will be in charge of the new office.

The company also announced that it has named Daniel C. Murphy Co. of Des Moines, Iowa, and L. V. Appleby Co. of Albany, N. Y., to handle its Thermaflex air conditioning products.

Buensod-Stacey Names Robert F. Hayes

NEW YORK CITY—Buensod-Stacey, Inc., a division of Aeronca Corp., announced the appointment of Robert F. Hayes for sales promotion.

He will concentrate on the application of dual duct systems for heating, air conditioning, and ventilating of schools and colleges. Formerly, Hayes was advertising manager of Anemostat Corp. of America.

Thermador Appoints John F. Sorenson

LOS ANGELES—Thermador Div., Norris-Thermador Corp., has announced the appointment of John F. Sorenson, as heat pump and air conditioning sales manager.

J. F. Sorenson

Sorenson has been with Thermador Div. for more than three years. Prior to that time he was associated with another manufacturer of air conditioning equipment as district sales manager for the southern Illionis and Missouri area.

According to H. Jack Meany, division general manager, the Thermador heat pumps and air conditioners will be distributed in the southern California area initially, but distribution will expand on a nationwide basis in areas where air conditioners and heat pumps can be economically and efficiently used by the consumer.

Pennington Joins Black & Ryan Staff

PHOENIX, Ariz.—James G. Pennington has joined the sales staff of Black & Ryan Air Conditioning Co. here, it was announced by Leon S. Black, Sr., president of the organization which is the Arizona distributor of Carrier air conditioning.

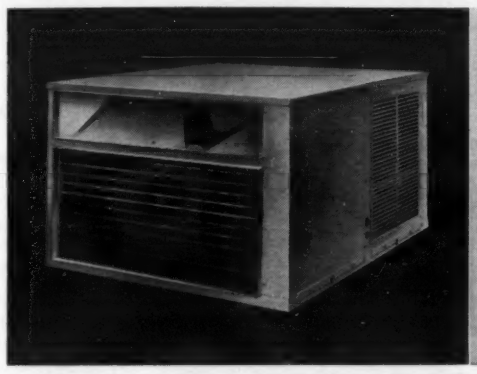
As assistant sales manager, Pennington will handle the sale and promotion of Carrier air conditioning to dealers in Phoenix and throughout Arizona, assisting Harold J. Marchant, general sales manager. Pennington was associated with Ware-McClelland Supply Co.

Embassy Industries Plans 'Panel-Track' Sales Program

BROOKLYN — Embassy Industries, Inc., manufacturer of "Panel-Track" baseboard, announced a new sales booster program for Panel-Track distributors.

The program, called "The Panel-Track Best To Use" campaign, "stimulates interest at the distributor management level by increasing the desire to sell products on the part of distributors' salesmen, phone clerks, countermen, drivers, etc.," it was explained.

"Participants in the program will enjoy such rewards as trips to any point on the globe, housewares, luxury clothing, and almost any other item the distributor and his personnel desire."



New Carrier 50DA Universal Weathermaker

This self-contained air conditioner series in four sizes from 23,000 to 59,000 Btuh provides low-cost comfort for almost any home or business. You can install Universal Weathermakers through a wall, indoors in basements, storerooms or attics, outdoors on the ground or on the roof. Equally practical as a free blow unit, in conjunction with existing ductwork, or with its own ductwork system.

New controls and new compressor make Carrier Universal Weathermakers more dependable than ever!

You may recognize the cabinet, but that's about all you'll recognize in this new improved Carrier 50DA Universal Weathermaker* for small central air conditioning systems. Carrier engineers have redesigned the inside to make the unit pounds lighter and far more efficient than previous models.

What's back of the improvement? Two exclusive Carrier-developed features—Time-Guard Circuit and the Micromite Compressor, both of which you can really *sell* to your prospects. Consider them separately:

Time-Guard Circuit: This unique time device monitors the complete refrigeration cycle with "instant" response . . . eliminates practically all electrical problems found in ordinary units. Result for your prospects: the best cooling possible *and* a minimum of "nuisance" calls.

Micromite Compressor: There's nothing like it for dependability in *any* climate and under *all* conditions. It is small in size, weight and power consumption, yet mighty in capacity and durability. Result for your prospects: efficient performance and long life.

The 50DA is just one of many examples how Carrier constantly supports its dealers with "firsts" to help them corner the market. The Carrier line is *complete*—for air conditioning and heating. For facts about a Carrier franchise, call the Carrier distributor listed in the Yellow Pages. Or write Carrier Air Conditioning Company, Syracuse 1, N.Y.

*Reg. U.S. Pat. Off.

Carrier Climate Center. Another Carrier "first" that's a hit with prospects. Dramatic 8" x 14" panel installs easily between the studs in any room . . . enables homeowner to tell weather at a glance . . . "dial" the climate he wants in his home . . . also make sure his air conditioning system is operating efficiently.

Carrier Air Conditioning Company

'AWAKE BEFORE IT IS TOO LATE— SHAKE UP LEST YOU ARE SHOOK'

T. A. Abbasi
Doha - Qatar
Arabian Gulf

Editor:

American manufacturers of refrigerators and window air conditioners produce and export 60 cycle equipment to Asia and Middle-East in particular to the tune of millions of dollars every year, whereas this area is a 50 cycle area.

This creates problems for the dealers, distributors, the servicemen, and the customers. From the day these machines are plugged in back comes calls, and repeated service calls for fan motor tripping, over heating, stopping, not working, bearings jamming and after a few days burnouts occur.

On contacting the dealer or agent the poor customer is told that the one-year warranty of the manufacturers is not applicable because the equipment is subjected to hazardous conditions and either he must buy a fan motor or as an alternate wait till the agent hears from manufacturers.

The same goes for the motor compressor. The customer listens to the oft repeated sermons of the technicians that these machines tend to over heat due to frequency or cycle differences and thus the guarantee is void. However, the agent is writing again to makers recommending free replacement and he must wait.

Dejected he goes away and sleeps in the open under the dark sky, sweats, and gazes into the stars and suddenly he sees a light the kind of which not seen before. It crosses the horizon and disappears. People shout that this was a space man in a sealed capsule going round the globe with all provisions of life.

Now he thinks aloud, "Sending a vehicle in space with a man in it, live—very live—with all the necessities and provisions; he is cycling around the mother earth; praise be to Allah."

The mother earth cycles and cycles but how long this will cycle in favour of those who sell inconveniences against hard cash instead of conveniences.

The so-called free world's trade lords are arguing the failure of their equipment because of 50-60 count downs (Cycles).

How long the customers will go on wasting their hard earned money so that they will buy something which does not work, so that the standard of living in some countries keeps upward trends at the cost of dissatisfied clients in Asia?

Awake before it is too late. Shake up lest you are shook.

Yours faithfully,
T. A. ABBASI

WE SHOULD KNOW OUR FOREIGN BUSINESSMEN

Lando Advertising Agency, Inc.
Pittsburgh, Pa.

Editor:

Congratulations for a fine job on the special World Trade Issue of AIR CONDITIONING, HEATING & REFRIGERATION NEWS. The articles in this issue were particularly interesting since they pointed out that American businessmen, in the air conditioning, heating, and refrigeration industries, must be cognizant of what their foreign contemporaries are doing. Congratulations again on a job well done.

MITCHELL KOZIKOWSKI

SOME 'VERY MUCH INS' WERE LEFT OUT OF WORLD TRADE SURVEY

With reference to the omission of some manufacturers from the surveys of "plants and licensees abroad" and "who is exporting where" in the Aug. 7 World Trade Issue, as noted in some letters on this page, the News regrets such omissions very much.

However, it was noted repeatedly in the issue that these surveys were based on such replies to a questionnaire as had been received from manufacturers, and that the listings were in no way represented as being complete.

WORTHINGTON

Worthington Corp.

Editor:

Your international issue of Aug. 7, 1961, is most impressive and I congratulate you.

There certainly is a splendid array shown of the international markets and what is going on in various parts of the world. Worthington received good coverage but I was quite surprised, particularly since your meeting so many of our overseas licensees at our international conference in Hong Kong, that Worthington was not mentioned in your survey of U. S. firms having plants and licensees abroad.

You met and carried a very splendid article on Bert Tiller and the Frigrite operation in Australia on page 22 and 23 of your issue. Similarly for Mohan T. Advani on page 24 and 25, Bernard Tunzini on page 28 and 29 and so on throughout the issue. Worthington manufactures air conditioning and refrigeration equipment in Australia, Brazil, France, India, Italy, Netherlands, and Spain and we are not even listed under the "Who Is Exporting Where" on page 62. Was this simply an oversight, did we fail to answer any of your queries?

N. A. GARDNER, Mgr.,
Air Conditioning Div.
International Sales Dept.

RANCO

Ranco, Inc.
601 W. Fifth Ave.
Columbus 1, Ohio

Editor:

We regret very much the omission of Ranco from the survey of export operations published in your Aug. 7 issue, and would like to rectify this omission with the following information.

While Ranco has engaged in export sales for many years, our first manufacturing activity was established near Glasgow, Scotland, in 1950. At that time we did not envisage the tremendous international potential which has generated since 1950.

From the comparatively small, initial operation in Scotland, our manufacturing activities have grown to a point where employment outside the U. S. is greater than that of our stateside operations. We now operate plants in—

Tannochside, Scotland
Plymouth, England
Hockenheim, Germany
Toronto, Canada
Olgiate Comasco, Italy
Lomazzo, Italy.

In addition, we have a 40% interest in Australian Controls Ltd. and have recently formed a Japanese company in association with Nichiden Kogyo Co. Ltd. providing for the manufacture of Ranco controls as are suitable to the Japanese market.

Each of the foreign facilities produce the basic Ranco products as befits the need in the area served. In some instances these affiliates, which are for the most part wholly owned, produce items not made by the parent company.

In addition to the foreign manufacturing and sales facilities, we have sales agents in principal countries throughout the world. Despite the foreign facilities, the parent company in Columbus continues to benefit from direct export sales throughout the world.

We have been extremely fortunate in obtaining management, engineering talent, and general supervision for our activities abroad. I believe it is of particular significance to note that we operate without resident American personnel at any of the plants.

JAMES MANECKE,
Vice President, Sales

TECUMSEH

Tecumseh Products Co.
Foreign Operations Div.
Tecumseh, Mich.

Editor:

We noted with a keen sense of disappointment that the Aug. 7 issue of the NEWS failed to include Tecumseh Products Co. as a U. S. firm having licensees abroad.

For your information, we are providing the following list of Tecumseh refrigeration licensees throughout the entire world:

Argentina: Fader S.A. Australia: Kirby Refrigeration Units Pty. Ltd. Brazil: Industries Pereira Lopes, S.A. Denmark: Danfoss Mfg. Co. France: L'Unite Hermetique, S.A. Great Britain: L. Sterne and Co., Ltd. Germany: Danfoss Flensburg G.m.b.H. Israel: Amcomad Ltd. Italy: Aspera Frigo, S.P.A. Japan: Mitsubishi Heavy Industries Reorganized, Ltd. Philippines: YsMael Steel Mfg. Co.

Tecumseh was also not listed in the Survey of the Aug. 7 issue which tells "who is exporting where." Tecumseh exports its U.S.A. made products throughout the world, having in addition, exclusive sales representatives in a number of countries where refrigeration products are being purchased in quantity.

J. A. GALAZZI,
Vice President,
Foreign Operations Div.

TECH CENTER

by
FRANK J. VERSAGI

Certification Programs: Pro and Con

Certification programs were discussed in the July 10 Tech Center. Frederick J. Reed, chief engineer of Air-Conditioning & Refrigeration Institute, felt that several of the references to ARI's program needed clarification, even correction. Here are Reed's comments.

It has been our feeling that the greatest single reason for some manufacturers not participating has been lack of knowledge or understanding of all the points involved. In only one instance, following a personal discussion with a manufacturer of his questions or objections to the program, has the manufacturer not substantially become a participant in the program.

You reference the American Standard PRACTICE FOR CERTIFICATION PROCEDURES, describing it as "the touchstone, the reference point against which all certification programs are compared." We feel that the true touchstone of any certification program is the standard on which it is based, and we make no apologies for ours. The American Standard was carefully considered before the initiation of the ARI program, and we feel that our program more than meets all requirements.

'Adequate Represents Balance Between Ideal, Economically Feasible'

The only possible area of doubt that this is so would reside in those provisions using the word "adequate"; we feel that "adequate" represents the most practical balance between the ideal and the economically feasible, and our industry's manufacturers have, in our opinion, been most liberal in interpreting what is economically feasible; the cost of some of our participants, if we could disclose it, would be rather startling.

You discuss "adequate sampling" and mention "over 50 manufacturers producing over 1,500 models."

We point out that many of these "models" are various combinations of repeated components, such as a (nominal) 5-ton condensing unit matched with as many as four (nominal) 5-ton furnace coils and one (nominal) 5-ton blower-coil, and the same condensing unit matched with (nominal) 4-ton and (nominal) 6-ton groups of coils.

In such cases, test results on the condensing unit and one coil combination, coupled with adequate certification data on the other combinations, make it possible to judge accurately the claims for the whole group. In addition, there are a number of instances where identical models are marketed under several trade names, and can be identified by us as being identical.

On this basis, we can reduce the current listing to about 420 basic models. I submit that 60 tests per year out of 420 models, or 14 *per cent,* is *much more* than a "tiny percentage"; taking economic considerations into account, it is a *very generous* percentage.

'14% Is Much More Than A Tiny Percentage'

"Marked overrating" is *not* being done with impunity by participants in the program. Any properly documented complaint is followed up, including a test of a unit from the open market, until it has been satisfactorily settled.

NEMA Program Discussed

Next you discuss the NEMA program.

The NEMA program certifies only capacity at Standard Rating Conditions; the ARI program certifies this plus several performance criteria, the toughest being continuous operation with 115° outdoor ambient and 95° indoor ambient at either 90% or 110% of rated voltage.

The NEMA program, we understand, involves a 10 man-hour test costing $250, on equipment costing $161 on the average; the ARI program involves a 95 man-hour test costing $1,650 on equipment costing $668 on the average.

To test 50% of the *basic models* of *all* the room units listed in the NEWS for 1961, would require about 150 tests; this *could* be done easily by a single facility within eight months. The ARI program, gradually expanded to 60 random tests per year at present, will keep a larger and more expensive facility on a three-shift basis — and no time to spare.

Number of Firms Dropped From Program

A number of companies have been dropped from our program, such action has not been specifically announced since April, 1960, as a matter of policy.

In the case of a unit failing, the manufacturer is required to stop production of the model in question until the matter is settled; the same unit does *not* "pass back and forth"; if a small component is at fault, it is permitted to substitute another; if it is then definitely shown to be an isolated failure of the component—by virtue of a successful test of the whole unit — the model is considered to have passed; however, if any significant change is required in the component, a new model designation is required and all further production must incorporate the new component.

Mfrs. Have Withdrawn Lines, Submitted New Line

We have had cases where a manufacturer has withdrawn his line, discontinued production, and resumed production with a new line *after* satisfactory passing test specified by the ARI Chief Engineer. We have had cases where a manufacturer, after one failure, was required to submit units of other models for test and redesign and successfully pass tests at ETL on a large part of his line.

During this period, production on all questioned models was halted until agreement was reached. Add to this a large number of voluntary reappraisals of ratings, and you see a truly effective *program.*

Ridiculous To Claim That There Is No Need for Program

The claims that there is no need for the certification program are ridiculous. A group of 25 of the leading manufacturers are not going to devise and participate in a program of this nature and magnitude if there is no need for it.

And many of the industry's customers, including important Government Agencies, felt that some program such as this was necessary, and have been strong supporters of it.

Finally, after explaining the details of our program, let me say that we are definitely not satisfied that it is perfect. We are examining many possibilities for improvement, and will not hesitate to put feasible improvements into effect.

Virginia Chemicals Promotes Wilstrup

WEST NORFOLK, Va.—John E. Wilstrup was recently promoted to sales supervisor for the refrigeration sales department of the Virginia Chemicals & Smelting Co.

J. E. Wilstrup

R. H. Israel, manager of the department, stated that Wilstrup will be responsible for the territories in the southern states covered by three district sales representatives and will direct the activities of two field engineers who operate in that region.

Wilstrup joined Virginia Chemicals in 1950. After spending several years working for the refrigeration sales department in West Norfolk, he was appointed in 1957 to the post of field sales representative for the Texas-Louisiana area.

erect ductwork easily with
STANDING "S" CLEATS

PRICE PER 100 FEET—F.O.B. SPRINGFIELD, MO.

GAUGE	100-999 FT.	1000-4999 FT.	5000 FT. OR MORE	EST. WT./FT.
26	$7.20	$6.90	$5.90	.453
24	9.60	7.90	7.40	.578
22	10.50	9.00	8.50	.703

GALVANIZED – 10 FT. LENGTHS ONLY

PM
PAUL MUELLER COMPANY
P.O. BOX 150 – SPRINGFIELD, MISSOURI

NEW 75 Amp

GENERAL ELECTRIC NOW OFFERS SEVEN DIFFERENT SIZES OF CONTACTORS AND STARTERS...RATED TO 600 VOLTS

For Air Conditioning and Refrigeration. General Electric's new 20-, 25-, and 75-amp contactors and starters combine with present 30-, 40-, 50-, and 60-amp units to bring you a complete line of economical controls for incorporation into all your residential, commercial, and industrial air conditioning and refrigeration equipment.

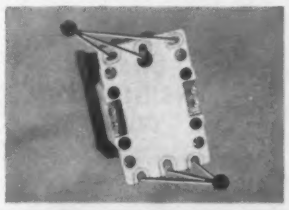
For Resistance Heating. These same General Electric controls have special current ratings for resistance heating loads—each will carry its maximum amp rating at all voltages, allowing you greater performance from the contactors and starters.

And with all seven ratings, you get a complete line of easy-to-install, compact controls with lower power requirements . . . yet fully rated up to 600 volts. Straight-through wiring is standard on all ratings.

For the complete story on this full line of air conditioning, refrigeration, and heating controls, contact your local G-E sales engineer today. Or write to Section 811-27, General Electric Co., Schenectady, New York for publication GEA-7316A.

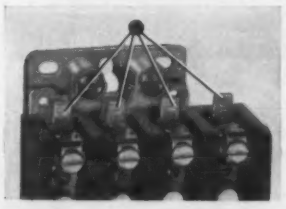
Progress Is Our Most Important Product

GENERAL ELECTRIC



Durable Cast Aluminum Baseplate on 20- through 40-amp ratings has keyhole slot and two holes at top and three slots at bottom to provide interchangeable mounting.

Pressure-type Terminals on 30- through 75-amp sizes speed hook-up of line and load terminals; screw-type on 20- and 25-amp ratings accept spade and ring terminals or bare wire.



Accessory Connections. Optional quick-connect single- and double-blade terminals on 30- and 40-amp designs permit accessory connections such as condenser fan motors, control transformers, and coils.

From the Files of the News

25 years ago

Installation of air conditioning effected a reduction of 27% in time lost to illness in the insurance offices of the United Service Automobile Assn. over a year's period, with reduction in absences from 7.5 to 5.5 days per employe per year attributed to air conditioning. . . . To win over office building owners and managers to general office air conditioning, the Electric League of Indianapolis is sponsoring a six-week display titled "The Correct Office" which features use of air conditioning, but which also emphasizes correct lighting and modern office fixtures.

Ratings evolved from tests of commercial refrigerating machines made in accordance with the requirement of the ASRE Standard Method of Rating and Testing Mechanical Testing Units are being certified by manufacturers of the Refrigeration Division of NEMA or to the Refrigeration Machinery Association. . . . International Cinema, Inc. has installed a special Westinghouse air conditioning system in its film drying laboratories for drying films under adjusted temperature and humidity conditions so it won't become brittle.

The $2,800 air conditioning installation installed in Hamburger Inn, Richmond, Ind., paid for itself in two months' time. . . . When seeds stored in an air conditioned room maintained a higher state of germination, the Reuter Seed Co. ordered more conditioning to save additional thousands of dollars for usual cold storage fees.

World Congress of Refrigeration papers dealing with air conditioning research covered topics of air conditioning in damp climates, air conditioning with ice, thermodynamics principles in air conditioning, and economic barrier to refrigerated air conditioning. . . . The NEWS editorial "The Market for Air Conditioning is as wide open as the need for education is great."

10 years ago

Refrigeration & Air Conditioning Contractors Assn. (RACCA) of Southern California said it will "stand firm on its rights" as a collective bargaining agency for the local refrigeration and air conditioning industry, pointing out that "There are many problems in the refrigeration and air conditioning industry which are not comparable to those in other trades." . . . Two thirds of all major textile industry air conditioning installations sold by Carrier since 1950 have involved refrigeration as well as humidifying equipment, apparently because high equipment speeds and increased lighting necessary for intensified production add to the heat load in the textile plants, making cooling a must.

The new University of Houston's $1 million power plant houses the heating and cooling equipment for all buildings on the campus—first major university to have all its buildings air conditioned. . . . A Utica, N. Y. firm which rents air conditioning units for 75 cents a day has found it not only profitable, but 75% of the units are finally purchased.

Donald C. Minard is the new president of The Trane Co. R. N. Trane, founder and president since 1913, was advanced to chairman of the board. . . . A modern fruit store in New York City uses its two 5-ton unit air conditioning systems to cool customers comfortably by day and to "cold storage" is produce by night, eliminating the time consuming "setting up" and "picking up" of the fruits to cooler places.

There's a big opportunity in the restaurant market for salesmen of up-to-date refrigeration equipment who can prove to restaurant operators that their product can cut costs, it was revealed at the recent convention of the International Stewards & Caterers Association. With profit margins shrunk from 8% to 3% in a couple of years' time, reduction of costs through cutting down food waste becomes all-important.

Ray Edwards Answers Some Questions On:

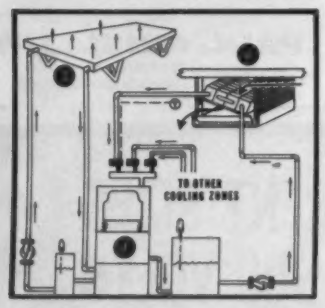
AIRVEC... AN AMAZING COOLING SYSTEM THAT PAYS OFF IN SILENCE AND LOW MAINTENANCE!

Q. I've heard about Airvec. What does it mean?

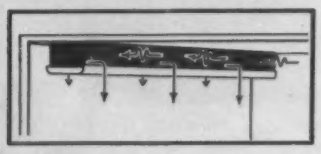
A. The Edwards Airvec System completely eliminates the noise associated with thru-the-wall and other fan—coil air conditioners. Noisy air-conditioners in apartments, motels and commercial buildings are a nuisance and can be money-losers. Motel operators, for instance, lose patronage. Office or factory employees don't work as well.

Q. How does Airvec work?

A. Let me draw you a sketch. Edwards Airvec Chilled Water System consists of (1) a packaged zoned chiller connected to (2) silent gravity room cooling coils. The chiller heat is rejected thru (3) the external Airvec condenser. Here's a schematic sketch of the piping layout.



Inside the rooms of the building to be cooled, inconspicuous valances near the ceiling hold the two or four tube system, through which is piped the chilled water. The valance looks like this:



Q. Do you put it near the ceiling because cool air drops?

A. Of course, and the result is gentle, draftless cooling, moving by convection alone, no rush of air forced out by noisy fans.

Q. What about maintenance?

A. There are no fans, no belts, no need to lubricate, no air filters, no cooling towers. The elimination of these unnecessary devices alone represents a substantial saving over the years.

Q. Anything else we should know about the Edwards Airvec System?

A. Yes. You should know about Zone Control. Temperatures in each room, apartment or area can be individually controlled for the comfort of the occupant by means of inexpensive Edwards Zone Valves.

Q. Is this another Edwards first?

A. We think it is. We are emphazing the idea of a completely packaged cooling system with silence and low maintenance as prime objectives. In cooling and heating, remember, we *engineer* our products — that's why we stress the word "Engineering" in our corporate name.

Q. Can I get more details?

A. Certainly. Just fill out the coupon below and we will rush you special descriptive sheets on Airvec and a sheet on our "Zone-Controlled" heating system. We will help you lay-out your jobs, too.

EDWARDS ENGINEERING CORP.

Pompton Plains, N. J.
TEmple 5-2808

PACKAGED HEATING AND COOLING THROUGH YOUR CONTRACTOR

YES, SEND ME YOUR LITERATURE ON:

☐ Airvec System
☐ Zone Controlled Heating
☐ Layout and engineering help

NAME _____
COMPANY _____
ADDRESS _____
CITY _____ STATE _____

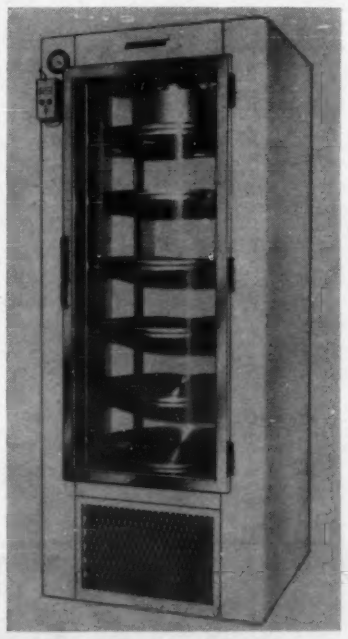
ACH9

'Hetrofoam 250' Offers Technical Versatility

● A new one-shot, rigid, fire-retardant polyurethane, "Hetrofoam 250"—said to combine lower cost with exceptional technical versatility—has been introduced by the Durez Plastics Div., Hooker Chemical Corp., Dept. AH&RN, North Tonawanda, N. Y.

Reported to be a major economic and technological breakthrough in the development of rigid foam systems, Hetrofoam 250 "offers significant cost-savings through elimination of expensive and often critical prepolymer processing of resin with toluene diisocyanate," the announcement said. "Foam is created by the simple reaction of a polyol and a polyisocyanate."

Dimensional stability and low water absorption and moisture permeability commend the new foam to applications in a wide range of temperatures and humidity in the building, refrigeration, and appliance industries, it was stated.



Cooler Said To Be Suitable Blood Bank

● A "Kold-Vue" cooler said to be suitable for hospitals as a blood bank is being offered by Kold-Draft Div., Uniflow Mfg. Co., Dept. AH&RN, Erie, Pa. This cooler may also be used in drugstores or hospitals for pharmaceuticals requiring refrigeration.

Features include automatic safety alarm system. Outside thermometer for visual check, seven-day temperature recorder available; interior finish is of white baked-on enamel.

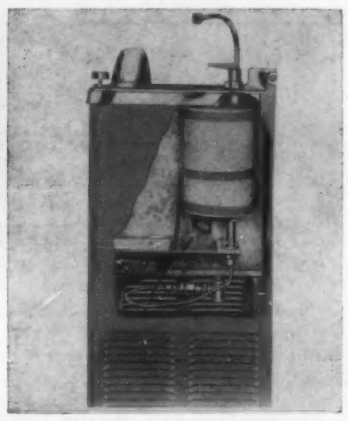
The Kold-Vue has adjustable, revolving shelves; full-vision multi-pane hermetically-sealed glass door; and constantly circulating cold air. It requires 1 sq yd of floor space. Capacity is 20 cu ft or 24-30 cases.

Insulating Cement Has Range Up to 2,100° F

● A new high temperature insulating cement with an effective temperature range to 2,100°F has been introduced by Baldwin-Ehret-Hill, Inc., Dept. AH&RN, Trenton, N. J.

Called BEH No. 1 Plus insulating cement, it is whiter than the 1,800° material it replaces and is easier to handle. Through a reduction in nodule size of the mineral wool, the mixed material, ready for application, is less lumpy.

Actual tests indicate dry coverage of 45 sq. ft. 1 in. thick per 100 lbs. Linear shrinkage after heating to 2,100° is only 3%.



Converts Water Cooler To Hot and Cold Unit

● A conversion kit that can be installed in less than an hour will change any of the Westinghouse "wall line" series of water coolers into "hot and cold" units, according to Westinghouse Electric Corp., Dept. AH&RN, 300 Phillippi Rd., P. O. Box 2199, Columbus 16, Ohio.

The change can be made in the unit whenever it is presently installed and without altering its external appearance, the announcement said. The addition of the 2-qt heating reservoir will provide sufficient hot water for making instant coffee and other soluble beverages.

The heating chamber of brass has an adjustable thermostat and asbestos insulation. It has a 1,000 watt corox-type immersion heating element that puts heat right into the water.

Safety Valve Claims Wide Range Capacity

● A new wide-range capacity safety valve "with sufficient capacity adequately to protect practically every type of duty encountered in the average refrigeration installation" has been announced by Vilter Mfg. Corp., Dept. AHRN, 2217 S. First St., Milwaukee 7.

"When viewed from above," the company pointed out, "the valve body has a pear-shaped contour which provides the ample gas-flow space necessary to achieve its large capacity. The valve is designed so that the gas escaping at high speed passes horizontally over the valve seat when the valve pops. This sweeps the surface clean so that it is virtually impossible for dirt to lodge in this vital area and enables the valve to seat tight again after it has popped."

The ½-in. valve with 1-in. outlet is suitable for both ammonia and halocarbon service. It has a capacity range of from 1,895 lbs of air per hour at a set pressure of 100 psig through 7,790 lbs per hour at 425 psig, according to the company.

Smoke Alarm Operates Electronically

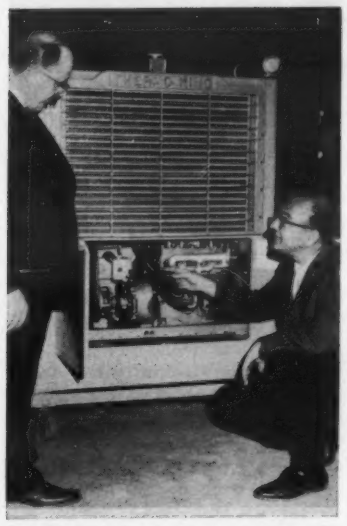
● An electronically operated detecting device that will operate a relay and close dampers in air conditioning and other duct systems if smoke is present has been announced by Fuel Watchman Co., Dept. AH&RN, 77-29 138th St., Flushing 67, N. Y.

Called the Smoke Watchman, it will sound an alarm on detecting excessive smoke. Used in heating systems, it can be wired to a remote time-delay cut-off to turn the burner off if smoke persists for longer than a designated time.

ARE you in need of a "just right" man to fill a slot in your organization—the man you are looking for will be reading the

NEWS' CLASSIFIED ADS

Trailer Unit Claims Simplicity, Increased Capacity



RALPH W. PORTER (left), general sales manager of Thermo King Corp., and Leonard L. Willis, chief engineer, examine SLR unit.

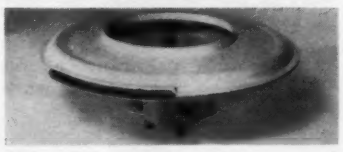
● Simple design and increased capacity is the combination offered by its new, improved SRL trailer refrigeration unit, according to Thermo King Corp., Dept. AH&RN, 314 W. 90th St., Minneapolis 20.

"Heating capacity has been boosted by a new, specially designed accumulator and superheating coil," it was stated. "The heating operation is controlled by a new, easy-to-read, easy-to-adjust thermostat with a -20°F to 80° range. The SRL can be adapted for the superheating requirements needed in cold climates.

"Defrosting is started automatically when required. It features a new air pressure defrost switch actuated by frost accumulation which results in a change in pressure of the air flowing through the evaporator coil. Defrosting also may be started manually.

"Maintenance is made easier through new design changes featuring convenient access to components. The control panel is simplified and unitized. It has electrical relay controls and switches assembled in one panel, and is equipped with quick disconnect plugs for instant replacement and service."

'Filterjet' Fan Shoots Air 25 ft Around Corner



The cowl collects the air and ejects the air as a tangential, very defined jet."

● A "Filterjet" fan that will pick up air from an air conditioner or radiator, filter it, and shoot it 25 ft around a corner into a stagnant zone has been developed and introduced by Chemex Corp., Dept. AH&RN, 41 Murray St., New York City 7.

Dr. Peter Schlumbohm, inventor, said, "The Filterjet fan is based on a new effect which I discovered 10 years ago. Porous discs will, on rotation, create and maintain a vacuum in the space between them. The air is sucked into this space through the pores of the discs and gets filtered.

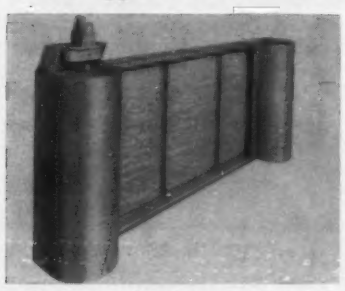
"Filtered air is centrifuged to the periphery and leaves through a 360° lip. Against the pressure of the atmosphere, the lip opens like a valve for a one-way flow.

Having no propeller, operation is quiet, Dr. Schlumbohm said.

The Filterjet fan is 16 in. in diameter and weighs 7 lbs. The motor, which will operate at any angle, consumes 100 watts. Motors of 115 volt, 60 cycle and 230 volt 50 cycle are available.

The $50 retail price for the fan includes 25 15-in. filter discs. Refills are available at $2 for a pack of 25.

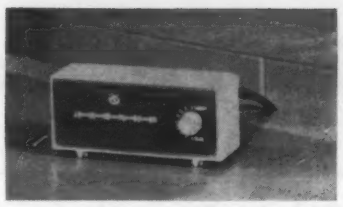
Roll-Type Air Cleaner Offers 'More Versatility'



● A new, "more versatile" roll-type air cleaner has been announced by the Farr Co., Dept. AH&RN, P.O. Box 90187, Airport Station, Los Angeles 45. It is known as the Roll-Kleen model H-5 (H for horizontal media movement; 5, the fifth in this series).

The H-5 is available with automatic (motorized and controlled operation) or manual drives, with or without media covers on either or both ends, and is manufactured in 84 standard sizes. "These features, plus the reduction in the number of moving parts and a new simplified method of media loading, make the H-5 well suited for use with the latest model air handling devices.

"The H-5 is designed for installation in a variety of positions regardless of the direction of air flow. Media movement can be in either direction."

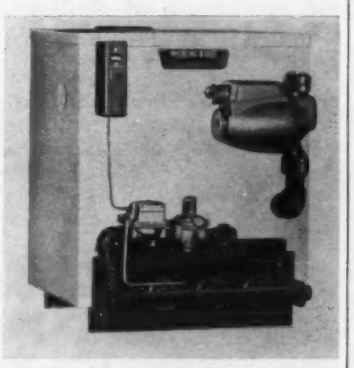


Desk Thermostat Operates Pneumatically

● A new desk thermostat "suited for executive offices and conference rooms where it is important that temperature adjustment be both precise and handy in accommodating one or a few individuals or a large staff meeting" has been announced by Powers Regulator Co., Dept. AH&RN(AN-8), 3400 Oakton St., Skokie, Ill.

"Known as the 'Execustat,' the instrument takes no more desk space than a conventional desk clock, yet is heavy enough to prevent accidental brushing or tipping," the company said. "It is pneumatically operated and readily adapted to any space temperature control application. With a little advance planning, the Execustat can be easily relocated when desk locations or offices requirements are changed.

"Specifications: Finish — egg white and light gray with silver knob and trim; control action—direct; application—heating and/or cooling; adjustment — exposed knob; response — ½°F; range — 60°F to 85°; accuracy — ±1°F."



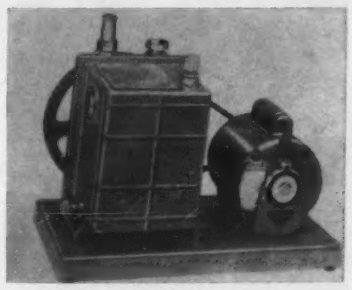
Gas-Fired Boilers Are For Residential Use

● A new line of factory packaged, cast iron residential gas-fired boilers available in 75,000, 100,000, and 125,000 Btuh input has been announced by Peerless Heater Co., Dept. AH&RN, Boyertown, Pa.

Features of the "MMF" series include cast iron boiler sections, burners, and base; flat top design with draft hood extended from rear, and flush type steel jacket finished in white baked enamel.

Boiler, gas controls, wiring, and circulator are factory assembled.

Duo-Seal High Vacuum Pumps Available In 4 Sizes



● The line of Welch Duo-Seal high vacuum pumps is now available through Robinair Mfg. Corp., Dept. AH&RN, Montpelier, Ohio.

Four sizes of pumps are offered —.75 cfm, 2 cfm, 5 cfm, and 15 cfm capacities. All draw down to .1 micron efficiency.

All models are vented-exhaust (gas ballast) types, which reduce pumpdown time and require fewer oil changes, Robinair points out. All pumps are charged with oil and equipped with electrical cord with switch, ready to use.

A patent feature, called the Duo-Seal, provides a by-pass at the seal to carry off the last increment of gas which may escape the exhaust port.

This operation is repeated twice each revolution, or at least 600 times per minute. With each repetition, the pressure in the vessel connected to the intake is reduced.

Want More Details?

ADDITIONAL details on products that are described on these pages may be obtained by writing the manufacturer at the address given in each What's New story.

Skuttle's Compact

MODEL 711

COUNTER-BALANCED HUMIDIFIER

For happy little homes

This low-priced, highly efficient unit requires just one installation — one adjustment. Designed without moving parts for trouble-free operation, the Model 711 is shipped completely assembled with 5 Vapoglas plates, stainless steel plate rack, and reversible valve seat. Perfect for the smaller home, this compact unit is easily installed and self-compensating to variations in water pressure.

PATENTED VAPOGLAS PLATES

Made of compressed pure glass wool, Skuttle Vapoglas plates are patented for quality protection. Extremely porous (they absorb up to 70% more water per pound than ordinary filter plates), they resist clogging longer.

Skuttle MANUFACTURING CO., Milford, Michigan

Dept. AC

Gentlemen: Please send complete information on

☐ Skuttle Model 711 ☐ Vapoglas Plates

☐ Skuttle's Complete Line of Products

Name_____

Company_____

Address_____

City_____ State_____

WE EXPAND YOUR DOLLARS MIGHTILY

Sure, everybody likes to make a buck go farther. At the Harry Alter Co. we think our prices are *always low.* And everybody big or small, city or country, pays the same fair price. Our transportation allowance saves you even more money. (And if you pick up at one of our 6 counters, you still get this allowance.)

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SAVE MONEY, time and effort by ordering from our new *Dependabook*, the most complete catalog of all. 250 pages. Over 10,000 items carried in stock. *Wholesale only.* Your orders filled really fast by mail, or they can be picked up at one of our six big warehouses.

Write on your letterhead for the 1961 DEPENDABOOK . . .
Also our monthly Flyer of surplus and close-out Bargains.

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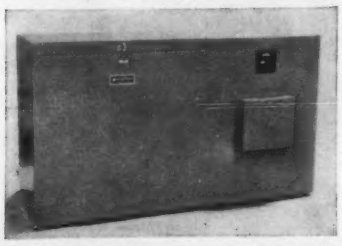
FREE PARKING AND FAST COUNTER SERVICE AT THESE 4 BIG WAREHOUSES

What's Going On in Commercial Refrigeration

News of Markets, Products, Methods

Cincinnati Sub Zero To Display Metallurgical Chilling Units



CINCINNATI — Cincinnati Sub Zero Products here has announced that it will display units for metallurgical chilling at the Detroit Metal Show, Oct. 23 to 27 in booth 1033.

Star attraction will be a low temperature chamber that will chill 200 lbs of stainless steel per hour from ambient to -120°F. Measuring 36 by 24 by 30 in., it has a capacity of 4,000 Btuh at -120°.

Because of adjustable temperature control and a range from ambient to -150°, it can serve equally well for other metallurgical applications such as stabilization, tool treatment, expansion assembly, and stress relief, the company said.

Also on display will be a 4-cu ft "V" model designed for moderate production.

Cherry-Burrell Opens Additional Eastern Sales, Service Center at Mountainside

CEDAR RAPIDS, Iowa — Cherry-Burrell Corp. has just opened an additional sales and service center at Mountainside, N. J. to serve the eastern United States with high speed warehousing facilities.

The Mountainside (eastern) Sales and Service Center will back up the existing sales branches in the eastern United States with parts and supplies.

Requests for parts and supplies are relayed by teletype to the Mountainside center from the sales branches. These messages are converted to orders by 100-word-per-minute electronic machines. Within minutes the parts or supplies are packaged and ready for shipping.

"The sales and service centers have all been located near major transportation centers so that we can give higher speed delivery on parts and supplies," David M. Mojonnier, vice president-sales, stated.

"Our service will be greatly improved because more extensive inventories are carried in these new service center buildings," he indicated

Other Cherry-Burrell sales and service centers are at Los Angeles; Toronto; Melrose Park, Ill.; and Charlotte, N. C.

Trade Headaches For P-R-O-F-I-T-S

YOUR food freezer customers phone you for "drop-everything-and-rush-over" de-frosting help! What do you do . . . and, what do you get? Just headaches! Now, you can sell and install (at a neat profit) a patented attachment that enables your customer to "dial" safe, lower temps; and get higher humidity and frost-free coils, GUARANTEED! This Control attachment easily pays for itself in safeguarding food quality and in saving shrinkage on perishables. 67 per cent of our sales is from "additional" units in supermarts, hotels, restaurants . . . it is that good. If you want "de-frosting" to make you money, write for "Bossman Details." Address: Bossman, 613 W. Washington, Chicago 6, Ill.

Rich Ice Cream Plant Installs Recold Coils

BUFFALO — The Rich Ice Cream Co. plant here, in its latest addition, has installed a battery of seven Recold Corp. A-3100 FG coils.

The coils, spread along a 100-ft wall in the firm's new hardening room, will help put out 10,000 gals. of ice cream in every 12-hour period, Recold reported.

"The 77,040 Btu units are operated with -40° recirculated ammonia liquid," it was pointed out. "Approximate refrigeration capacity is 45 tons. Temperature inside the hardening room is 20 below. Total area of conditioned space is 6,000 sq ft."

Creamery-Package Mfg. Co. was the general contractor on the new hardening unit.

Roy Follett Names E. Henry Bilfelt

PHILLIPSBURG, N. J.—The Roy Follett Corp. has announced the appointment of E. Henry Bilfelt as factory manager of its Phillipsburg plant.

Since 1954, Bilfelt was senior project engineer for vending machines manufactured by the Rowe Div. of Automatic Canteen Co. in Whippany, N. J. He will be responsible for the manufacturing of Follett ice storage bins and associated products.

Paul Maquelin, vice president, will continue over-all direction of manufacturing, and will also be responsible for production design of products under development.

Kodiak Elects Harter

ST. PAUL — B. J. Ostmoe, president of Kodiak, Inc., manufacturer of automatic cube and flake ice machines, has announced the election of Donald G. Harter as vice president—research and engineering.

Prior to joining Kodiak, Harter was director of engineering for the Decatur Works, York Div., Borg-Warner Corp.

Clayton L. Hall Dies

PITTSBURGH — Clayton L. Hall, president of Koldflow Refrigerator Co. here, recently passed away at his home. He had been associated with the commercial refrigeration field for more than 40 years.

Operation of the company will continue.

Locker & Freezer Provisioners Meet In St. Louis Sept. 17 to 20

ST. LOUIS—The National Institute of Locker and Freezer Provisioners will hold its national convention Sept. 17 to 20 at the Sheraton-Jefferson hotel here.

Presentation of new information on freeze-drying and dehydro-freezing will be one of the prime attractions of the convention program.

Other features include a report on studies of all U. S. food plan operations and locker plant customers; an exhibit of supplies, equipment, merchandise, and services; a ham show; seminars on locker plant management and sales, a demonstration of an electronic range, and an inspirational address by Dr. Norman Vincent Peale, according to the program.

Registration is $12.50 for Institute members and $17.50 for non-members.

Hussmann First Half Sales Up 1.6% Over Same Period Last Year

ST. LOUIS — Consolidated sales of Hussmann Refrigerator Co. for the first half of 1961 totaled $17,586,929, an increase of 1.6% over the same period last year, the company reported recently.

Consolidated net earnings, however, amounted to $674,178 as compared with $911,042 last year.

"Operations in the first six months reflected activities at a somewhate lower rate than those originally anticipated and as a result earnings were adversely affected," the company report declared.

"Many steps have been taken . . . to provide a larger volume of the available business and, at the same time, to effect substantial decreases in operating costs.

"The results of some of these steps is now becoming evident and we believe the second half of 1961 will make a much more favorable comparison with the second half of 1960 than was the case in the first half of the year."

Savage Appoints National Refrigeration Direct Factory Distributor In 3 States

TRENTON, N. J.—The Savage Ice Cream Cabinet Div. of C. V. Hill & Co., Inc., has announced the appointment of National Refrigeration Mfg., Inc., Glendale, Calif., as its authorized direct factory distributor for California, Nevada, and Arizona.

Arrangements for the distribution program were concluded recently between C. L. Walling, president of National, and A. K. Thornley, Savage sales manager.

Sales of Savage cabinets will be handled directly through National Refrigeration Sales, Inc., a subsidiary of the manufacturing concern.

National is maintaining warehouse stocks at Glendale, San Francisco, and Phoenix, each a central location permitting same-day or overnight delivery schedules, it was noted.

Remco, Inc. To Distribute Crystal Tip Ice Makers

FARIBAULT, Minn. — Emmett Bailey, vice president of the American Automatic Ice Machine Co., has announced the appointment of Remco Inc., Chicago, as distributor of "Crystal Tips" ice makers in Chicago.

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From Land Purchase to Grand Opening

Store Engineering To Be Subject of Seminars In Chicago Sept. 18-20

CHICAGO — Store engineering, from land purchase to grand opening, is the subject of a seminar series to be held at International House on the University of Chicago campus from Sept. 18 through 20.

Sponsored jointly by National Association of Retail Grocers of the United States (NARGUS) and The School of Business of Florida State University, the seminar will be directed toward retailers, store engineers, sales supervisors, and equipment manufacturers. Tuition for the three-day seminar has been set at $75.

Heading the seminar meetings and stimulating discussion among the "students" will be noted authorities on some fourteen major store engineering subjects, including architecture, exteriors, interior arrangements, and efficient parking patterns, it was explained.

Seminar members will find discussion and learning facilitated by visual aid equipment and the demonstration of materials and their uses.

Other topics will include site selection and trading area, formulas for financing, building materials, locating on property, layouts for perishables, anticipating competition, identifying for impact, and practical evaluation of specific layout problems, according to NARGUS.

Leading the discussion on interior arrangements for sales and service will be Ray M. Klein and Joe Tanaka, both of Hussmann Refrigeration, Inc.

Seminar registration and reservations for room accommodations (available dormitory-style at International House and at nearby hotels) should be sent directly to National Association of Retail Grocers of the United States, 360 N. Michigan Ave., Chicago 1.

Dairy Products Displayed In L-Shaped, 3-Deck Merchandiser

Perishables Loaded From Back To Assure Sales of Oldest First

NO NEED to interfere with customer to stock these cases for the inventory is stored in back room cooler immediately behind cases.

LAS VEGAS, Nev.—The "one-arm bandits" in the new L-Bar-L supermarket here, located in the Maryland Parkway Plaza Shopping Center, offer a game of chance — but nothing has been left to chance in the perishable displays.

Dairy products, beverages, and produce are displayed in an L-shaped 80-ft three-deck merchandiser installed in the front of walk-in storage coolers.

Cliff Luzier and Dick Lorenzo have found that in addition to providing more display, the open-front Sherer "Coolerama" has eliminated a lot of merchandise handling, for foods are delivered directly to the walk-in storage rooms from trucks, according to Sherer-Gillett Co.

"The display shelves, in turn, are stocked directly from the refrigerated storage, which also makes it easier to control inventory on a first-in-first-out basis," it was pointed out.

"During heavy traffic hours, there's no need to interfere with customers by trucking new stocks of perishables from back-room coolers to remote merchandisers."

NEWS readers are invited to write to the editor giving their opinions on any subject of interest to the industry.

Farmer Sells Refrigerated Eggs At Henhouse Door

WILSON, N. C. — To get fresher eggs than those sold by Robert Dew, you would have to keep hens right in your kitchen.

Dew, who has a high-density laying house three miles west of town, keeps a refrigerator of fresh eggs setting outside his henhouse door. Customers come out to the farm and serve themselves.

"We're now selling about 250 dozen a week this way," Dew explained. "That's not many when you consider our 10,000 hens, but it helps."

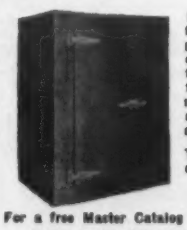
The current price is 40 cents per dozen. Customers make their own change and return the empty cartons.

In explaining why he went into the self-service business, Dew said, "People kept coming out wanting to buy fresh eggs. We were glad to have them, but it took time to stop and get the eggs.

"The refrigerator, which holds 20 dozen, is filled three times a day."

The remainder of Dew's production goes to Carlisle Poultry & Egg Associates located in Burgaw.

WALK-INS



Howard manufactures a complete line of commercial refrigerators and freezers. Priced right, provides more daily sales and profits.

Territories for distributors and manufacturers' agents.

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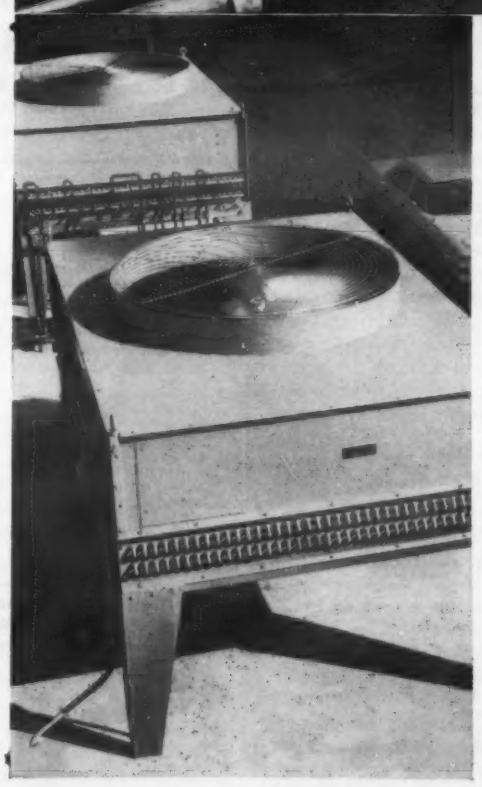

. . . H&M's Limitrol valve lets you use them year-round!"

"Many of my air conditioning and refrigeration systems have to operate 12 months a year. But cold weather used to raise cain with compressor-condenser balance.

"Then I learned that Halstead & Mitchell had a Limitrol pressure modulating valve that adjusts their air-cooled condenser capacity to compressor head pressure, whatever the outside temperature. What's more, H&M gives me multiple circuiting at no extra cost!"

You'd do well, too, to standardize on H&M Air-Cooled Condensers. There are propeller fan models with vertical or horizontal air discharge, and centrifugal fan models for inside installation with ductwork. Capacities of 5 to 100 tons.

Want more information? Call your parts wholesaler or write for Bulletin AC-102. Halstead & Mitchell Co., Dept. H-84, Bessemer Building, Pittsburgh 22, Pa.

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Export Representatives: Sobal-Kiolmann, Inc., 15 William St., New York 5, N. Y.

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Halstead & Mitchell

Dairy Equipment Standards Facing Amendment Oct. 3

WASHINGTON, D. C. — Ten impending standards, or amendments to existing standards, will be on the agenda when the committees that formulate 3-A Sanitary Standards for Dairy Equipment gather for their next regular semi-annual meeting.

About 100 engineers, processing technologists, milk and food sanitarians, and federal officials will attend the sessions at the Marriott Key Bridge Motor hotel here Oct. 3-5.

Three of the 10 standards are expected to be completed by the committees at this fall's meeting. They are the Ice Cream Freezer Standards, the Rubber Standards, and the Fillers and Sealers for Single Service Containers Standards.

Seven others to be considered are: Plastics Standards, Automatic Venders Standards, Air-under-pressure Standards, Batch Pasteurizer Standards, Separators and Clarifiers Standards, Amendment to Fittings Standards, and Amendment to Pump Standards.

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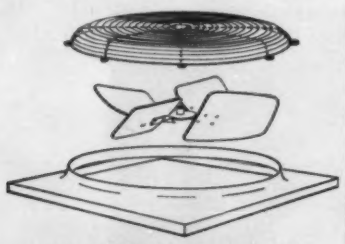

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Grocerette Names Outlet For Metropolitan New York, New Jersey

LONG BEACH, Calif.—Automatic Milk Service, Inc., Perth Amboy, N. J., has been appointed Grocerette distributor for metropolitan New York and New Jersey, it was announced by Grocerette Vending Machines, Inc., here.

Selo Electric Co. of Seattle has been appointed distributor for the Pacific Northwest, including Washington and Oregon, for the automatic grocery vendor.

Wrong Address

HAGERSTOWN, Md. — Jamison Cold Storage Door Co. reported that the address of the Kansas City midwest headquarters is 2201-5 Grand Ave., Kansas City 8, Mo. It was originally announced as 322 Ten Sixteen Baltimore Bldg.

Underground Cafe To Be Shelter for Oklahoma Bldg.

OKLAHOMA CITY—A cafeteria ordered for installation in the State of Oklahoma Capitol office building is to be installed underground, where it is intended to serve as a bomb shelter in the event of a national emergency.

Virgil Greene Co., Inc., of Oklahoma City, distributor for the Bastian-Blessing line of food service equipment, reported that the cafeteria line is 102 ft long including a speed line for fountain and sandwich service and a fast breakfast menu.

Additional units include a griddle stand, sandwich unit, and some 144 ft of stainless steel custom kitchen equipment. The food service equipment is all electric.

The cafeteria is connected with the two new office buildings by tunnels. The seating arrangement is in excess of 300.

The architects and engineers for this $10 million project are Hudgins-Thompson-Ball & Associates and Bailey-Bozalis-Dickinson & Roloff, both of Oklahoma City.

Dean C. Seitz Gets American Automatic Marketing Post

MINNEAPOLIS — Dean C. Seitz, sales manager of the wholesale refrigeration department of McQuay, Inc., has been appointed to the additional post of vice president-marketing of American Automatic Ice Machine Co., a totally-owned subsidiary of McQuay, according to a joint announcement by the companies.

D. C. Seitz

Seitz will be in charge of the entire sales structure of American Automatic Ice Machine and will report directly to Jay R. Resch, president.

"This move will enable both McQuay and American Automatic Ice Machine to build aggressive distribution systems through independent manufacturer's representatives in both the refrigeration unit cooler field and the complete ice maker field," Resch said.

"American Automatic, now one of the largest ice machine producers in the field, manufactures five sizes of cubers and three sizes of flakers with more models in the development stage," Resch added.

Bastian-Blessing Names Beecher

CHICAGO — Appointment of Bert W. Beecher as assistant advertising manager has been announced by Russell E. Owen, advertising manager of The Bastian-Blessing Co.

Beecher has been associated with Bastian-Blessing for some two years, during which time he has been working as a copywriter in the Fountain and Food Equipment Div. of the company.

Ripening Delay for an Apple a Day

THE "APPLE A DAY" you're encouraged to eat "to keep the doctor away" arrives from Heidema Brothers, Holland, Mich. just right ripe. For Heidema apples are ripened on a time schedule through refrigerated "controlled atmosphere." Three Brunner direct drive compressors, nine Dunham-Bush hot gas defrost units (three per room as shown in photo), and an IEC evaporative condenser refrigerate three controlled atmosphere room (30 ft by 50 ft by 21 ft). Total storage area accommodates 33,000 bushels of apples. Each of the three rooms has its hot gas units and condensing unit.

Payne Names Towne

LA PUENTE, Calif. — The Payne Co. announced the appointment of Charles E. Towne as sales representative for the Northern California distribution area, including the Sacramento and San Joaquin valleys.

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ADD DEPENDABILITY AND SAFETY TO APPLIANCES WITH MIGHTY MITE

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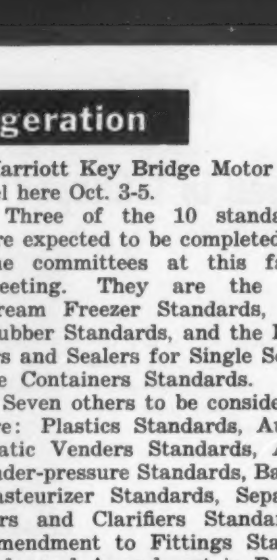
STOP terminal leaks instantly without opening the compressor



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MADE OF DELRIN The **derco** terminal seals are made of Delrin which is not affected by temperature changes, cannot crack nor short out. It does not increase the length of the original terminal post thereby permitting the replacement of the metal protective cover used on many units.

These seals are packed 3 in an attractive, re-usable hinged plastic box. The box becomes a handy container for nuts, washers, etc.

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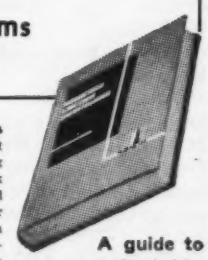
Solve automatic control problems faster . . . more efficiently



Here is a book that shows you how automatic control works in a heating or air conditioning situation . . . gives you information that you can apply in designing, installing, or servicing heating or cooling equipment. Avoiding analysis by mathematical formulas, this book shows you the **basic** problems likely to arise in various heating and air conditioning systems, and then gives you the **basic** principles for solving them. This is a practical book that takes you logically from means of measurement and means of actuation . . . through construction and characteristics of control devices . . . to the combination of individual devices into control systems.

A guide to
- basic principles
- basic problems
- how control devices operate
- how to combine control devices into systems

AUTOMATIC CONTROL of HEATING and AIR CONDITIONING

By JOHN E. HAINES
Vice-President, Minneapolis-Honeywell Regulator Company

354 pages, 6 x 9, 200 illustrations, $6.75

CONTENTS
1. Fundamentals of Control
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5. Pneumatic-control Circuits
6. Electric-control Units
7. Pneumatic-control Units
8. Control of Domestic Heating
9. Zone Control — Commercial Heating
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13. Control of Commercial Refrigeration
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This authoritative volume stresses consideration of two basic requirements of heating and air conditioning: 1) the need to design, select, or use controls with an eye to the characteristics of the equipment you're controlling; and 2) the importance of considering means and methods of automatic control from the beginning.

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The book covers methods of measurement for purposes of control, and practical means of transmitting control signals and actuating final elements. Representative examples of both electric and pneumatic control devices are described and illustrated.

Covers each special area

Special attention is given to each area—domestic heating, commercial heating and air conditioning, unit heaters and unit ventilators, and radiant panel heating systems, and the special problems of automatic control for refrigeration equipment as used in air conditioning. A helpful feature for study and reference is the chapter on definitions of control terminology.

You benefit by 24 years' experience

John E. Haines, Vice-President of the Minneapolis-Honeywell Regulator Company, brings to this book the benefit of twenty-four years of experience with controls engineering. His broad knowledge enables him to bring you a thorough explanation of all types of controls.

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CRMA Expects Slightly Better Second Half--

(Continued from Page 1, Col. 5)

likely at all, unless a very serious crisis arose in the cold war.

Chief among the assets cited by the "let's-take-a-look-at-ourselves" panel, is its inherent stability which arises from the fact that the demand for commercial refrigerators is governed solely by the rate of consumption of perishable foods, which in turn is almost fully determined by population. Nothing in the foreseeable future threatens this built-in security, panel members agreed—no competing products, and no indications of any radical changes in either the nation's eating habits or the methods employed in retail merchandising and food service operations.

Hazy Shadows on Bright Horizon

It was admitted, however, that there are some as yet hazy shadows on this bright horizon, such as a growing emphasis on the mechanical vending of some type of food, and the freeze-dry process which permits the storage of perishable food products without refrigeration.

One of the industry's principal liabilities, the panel declared, is the bad habit the individual manufacturers have acquired of offering the commercial refrigerator buyer models that are virtually carbon-copies of competitive makes designed to do the same job. As the result, it was pointed out, the order usually goes to the salesman with the sharpest pencil because the buyer is convinced that inasmuch as make "A" is the spitting image of make "B" it is also of exactly the same quality, and will provide equal performance.

Disappearance of Creative Selling

Another of the industry's weaknesses, responsible to a large extent for its shrinking profits, said the industry, is the almost compete disappearance of creative selling. This can only be overcome through scientific sales training and intelligently applied advertising and sales promotion methods.

In line with the need for improved sales effort was cited the need for continued close relationship with dealers selling commercial refrigerator equipment, and continuing consultation with dealer representatives on problems of the latter group. A close relationship of this type has been maintained through the years by a liaison committee working with the National Commercial Refrigerator Sales Association.

Urge Mandatory Repurchase Agreements On 'Outside' Equipment

A couple of areas in dealer operations in which some special problems have been discussed were described to the CRMA members. One is the matter of more and more "outside" equipment and appurtenances for a retail food market (such as scales, decorating costs, and the like) being included as part of the "package" which is financed through the commercial refrigerator dealer. In such instances, manufacturers are urging strongly that repurchase agreements be mandatory on all such "outside" equipment.

It was also reported that dealers are running into some difficulties in the field, particularly as control systems and other parts of the refrigeration cycle become more complicated, in "matching up" components in repair and replacement operations.

What they run into, it was said, is that different model numbers are used for an identical component sold for OEM purposes, and sold to a wholesale supply house for repair and replacement purposes. A request was made for the CRMA members to exert whatever influence they might have to rectify this situation.

The special panel that presented its views on the industry's current status included Glennon J. Doyle, C. V. Hill & Co.; John D. Harris, The Warren Co.; J. L. Kaufhold, Weber Showcase & Fixture Co.; and Edward N. Northey, Herrick Refrigerator Co.

Independents Seen as Source of New Business

The forecast panel had been asked to indicate the probable demand for the balance of the year. L. O. Bower told the group that much new business can be expected from independent food retailers, many of whom have learned to combat chain store competition successfully by going them one better in merchandising methods, an important ingredient of which is extensive remodeling of their stores, with all-new equipment throughout.

The industry's newest product, the multideck frozen food display case, Bower said, should also account for considerable new demand, because most merchants are seriously cramped for floor space, and as they can no longer "go out" they must "go up." This problem is constantly becoming more pressing, he pointed out, because of the ever greater variety of frozen foods being offered.

Multideck Frozen Food Case Described as Must For Full-Line Food Store

John Romadka, Federal Refrigerator Mfg. Co., said he considered the multideck frozen food case a "must" for the majority of full-line food stores, and predicted industry sales of this model would eventually top those of the horizontal-type low temperature fixture. He also predicted a substantial increase in military buying by the latter part of the year as the result of the partial mobilization ordered by President Kennedy, and suggested that this should offset any letdown in domestic demand during the second half.

Some of the increasing problems—and some of the increasing opportunities as well—in the food equipment field were described by Edward Northey, Herrick Refrigerator Co.

Demands of users, together with many new variations in building and architectural design and treatment, have made it necessary for the food service equipment manufacturer to broaden his line greatly during the past several years, Northey points out.

Instead of a few relatively simple models of reach-in refrigerators which filled the bill a few years ago, the food service equipment manufacturer must now provide pass-through models, top mounted models, accessory packages to permit changes to conform to architectural variations, and mobile models.

In each line of equipment, the manufacturer may have to provide (1) standard models (2) standard models with variations (3) custome models.

Northey listed the following equipment for an actual motel dining facility, which illustrates the variety of equipment to be provided, but which also reveals the spreading market for food service equipment:

Two standard reach-in refrigerators, one pass-through reach-in, two low temperature refrigerators, one cold-hot cabinet, one refrigerated tray cart.

Northey also commented that manufacturers would be well advised to have dealers with competent installation and service staffs to be responsible for installation and maintenance of the more complicated present-day food service units.

Inventory Turnover Up

Reports made to the group included the results of the annual inventory turnover survey, which produced a composite rate of 5.13 times, a slight improvement over the 1960 figure. Another was a report by the frozen foods equipment committee which revealed that the recommendations for handling practices recently issued by the coordinating committee of the frozen food industry, to modify the so-called AFDOUS code, had not been favorably received by the latter agency.

The committee predicted that agitation for a zero temperature maximum in all stage of handling will shortly be renewed, with much pressure to enact AFDOUS-type codes in the various states not already having such codes on their books. Only solution to this problem, said the report, is through educating frozen food retailers, and through them the consuming public, that simply because the pointer of the thermometer in a display case reads zero or lower, it does not signify that the product is of good quality nor can it show whether the product has been thawed out on the way to the store.

The committee was commended for the job it has done in working with various retailer groups and with some state health agencies, as in Massachusetts, in acquainting them with the operational efficiency of commercial refrigerator equipment.

Raw Materials and Components Prices

A panel assigned the task of reviewing the trend of raw materials and components prices reported that the Fall-Winter-Spring recession, by creating a buyer's market for many of the items entering into the manufacturing process, had kept such costs on a stable basis so that there has been no appreciable over-all change within that period.

The group was cautioned, however, not to expect this situation to continue indefinitely; if defense spending is accelerated to the extent called for in the administration's recently announced program, prices may move up sharply and, indeed, certain materials may be in short supply. The cost-review panel included Joseph W. Krall, McCray Refrigerator Co. Inc.; Robert M. Bell, Koch Refrigerators, Inc.; and William Fogel, Fogel Refrigerator Co.

Labor Developments

A review of labor developments and a forecast of the probable trend for the remainder of the year was reported upon by a panel made up of John R. Caulk, Jr., Hussmann Refrigerator Co.; John E. Ahrens, The C. Schmidt Co.; and William T. McCall, McCall Refrigerator Corp. They established through a company-by-company roll call that bargaining settlements during the past year have resulted in comparatively mild concessions, considering the "give us all we ask or else" tactics employed when the economy was running at top speed.

Here again, as in the case of materials costs, the group was warned that the situation may change quickly. It was agreed that the probable pattern will be established by whatever settlement comes out of the upcoming automobile industry negotiations, and a little later, in Big Steel, in both of which the administration's attitude will be a major factor.

Aerovox--

(Continued from Page 1, Col. 4)

product design and manufacturing techniques."

"Aerovox management," the announcement stated, "has long supported a continuing program of research and development to produce advanced materials and products designed to meet today's stringent requirements by users in all fields. New laboratory facilities, production tools and equipment, manufacturing techniques, and quality control procedures have all contributed to this new warranty policy.

"While it costs more for Aerovox to build-in this added value for the customer's benefit, there will be no immediate across-the-board price increase on either Aerovox capacitors or resistors."

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Candidates should be: age 40-45; college trained in engineering; experienced in design, production of models, testing and approvals; acquainted with field requirements to recommend new models and changes; and know the requirements of Underwriters' Laboratory, American Gas Association and Air-Conditioning and Refrigeration Institute.

The Director of Engineering will report to the President and work with the heads of Sales and Manufacturing. Compensation will be substantial salary plus important incentives. Reply with resume in strict confidence. BOX A6846, Air Conditioning, Heating & Refrigeration News.

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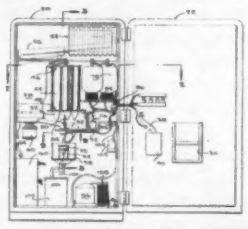
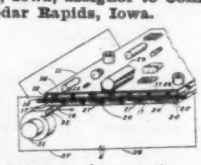
PATENTS *Week of May 16*

2,984,059. APPARATUS FOR DISPENSING CONFECTION ICE. Jack B. Hollingsworth, 121 E. Claiborne Square, Chalmette, La.



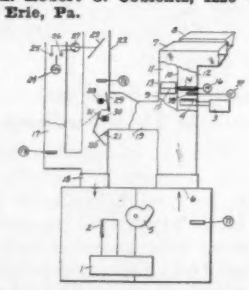
1. In an apparatus for dispensing confection ice, a holder for a dispensing cup, an overhead supply of dispensing cups, a chute cooperatively mounted between said supply and holder for delivering a cup to said holder, a first normall open switch, a first electrically actuable means operatively connected to said supply and operable upon closing of said first switch to introduce a cup from said supply into said chute and direct same into said holder, a delivery conduit for conveying shaved ice therethrough mounted so as to discharge into a cup when supported in said holder, a storage tank, a supply of ice in said tank, said tank being connected in communication with said conduit. . . .

2,984,077. METHOD OF USING THE PELTIER EFFECT FOR COOLING EQUIPMENT. Harold V. Gaskill, Cedar Rapids, Iowa, assignor to Collins Radio Co., Cedar Rapids, Iowa.



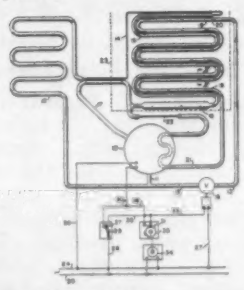
1. Apparatus for cooling, comprising a plurality of strips of a first thermoelectric material, a plurality of strips of a second thermoelectric material, first insulating material between the plurality of strips of the first thermoelectric material, second insulating material between the plurality of strips of the second thermoelectric material, first projections extending from the first plurality of thermoelectric strips and in engagement with the second plurality of strips, and second projections extending from the second plurality of strips and in engagement with the first plurality of strips.

2,984,082. AIR CONDITIONING SYSTEM. Robert C. Coblentz, 1226 W. 9th St., Erie, Pa.



1. In an air conditioning system, a refrigerating unit having a cooling coil, an intake for return air, an outlet for cooled air, and a fan for circulating return air over the coil and delivering cooled air to the outlet, means forcing part of the cooled air from the delivery side of the coil prior to delivery to the outlet back to the return air side of the coil, a dew point thermostate controlling the unit to maintain a cooled air temperature of substantially 50°F and thereby set the maximum moisture content of the conditioned air, a fresh air duct connected to the intake, a fresh air thermostat in series with the dew point thermostat having contacts open when the outside air temperature drops to the range of the dew point thermostat and closed when the outside air temperature is above that range, an auxiliary circuit around said contacts and in series with the dew point thermostat. . . .

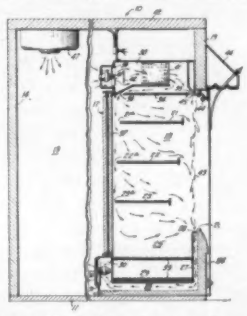
2,984,083. REFRIGERATING AND DEFROSTING SYSTEM. Frank P. Crotser and Carl E. Brown, Adrian, Mich., assignors to Revco, Inc., Deerfield, Mich.



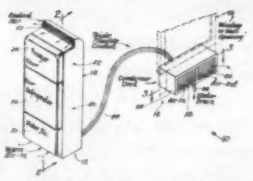
1. In a refrigerating and defrost system, in combination, a compressor, a condenser, a refrigeration restriction, and an evaporator operatively connected for circulating refrigerant; by-pass means for selectively applying hot refrigerant from said compressor in heat exchange relationship with said evaporator; means for reheating said by-pass refrigerant after said heat exchange operation; and second restriction means returning said reheated by-pass refrigerant to said compressor.

2,984,085. WALK-IN COOLER APPARATUS. Julius H. Rainwater, Atlanta, Ga., assignor to The Warren Co., Inc., Atlanta, Ga.

1. A walk-in cooler unit comprising an enclosure having front and rear walls and a top and bottom, vertical partition means extending the height of the enclosure intermediate said front and rear walls dividing the enclosure into a forwardly disposed display section and a rearwardly disposed walk-in storage section, a ceiling and a bottom in said display section spaced from the top and bottom of the cooler unit, respectively, defining a product display compartment therebetween, a plurality of product supporting shelves spaced vertically in said display compartment, door means in said intermediate partition providing access for restocking said shelves from said storage section, said front wall having an access opening therein extending over the major portion of the front wall affording customer access to said display compartment. . . .

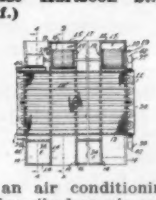


2,984,086. COMBINATION REFRIGERATOR, FREEZER, AND AIR CONDITIONER. Sidney B. Wertheimer, 7403 Woodmar Ave., Hammond, Ind.



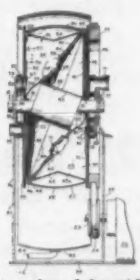
In a combination air conditioner, food refrigerator and freezer, the combination comprising a main unit having a refrigerator compartment and a separate freezer compartment therein, said main unit having a motor compartment therein adjacent the lower end thereof, said main unit having a disengageable closure mounted over the front of said motor compartment, said closure having an air inlet therein and an air filter disengageably mounted on said closure over said inlet, evaporator coils for cooling said refrigerator compartment and said freezer compartment, a duct in said unit extending upwardly along the rear side thereof from the rear of said motor compartment, additional evaporator coils in said duct. . . .

2,984,087. AIR CONDITIONING UNIT. Robert H. Folsom, Los Angeles, Calif. (15129 Hartsook St., Sherman Oaks, Calif.)



1. In an air conditioning unit of the class described an air cooling evaporator coil and an air heating condenser coil in spaced parallel relationship, encompassing walls enclosing said coils and providing respectively a coextensive damper space between the coils, a coextensive air transfer space for the evaporator on the side thereof opposed to the damper space and coextensive air transfer space to the condenser on the side thereof opposed to the damper space, transverse divider wall acting to divided the damper space into an alternate arrangement of air inlet damper chambers and air outlet damper chambers respectively and further acting to divide each transfer space into an alternate arrangement of air inlet transfer passages and air outlet transfer passages respectively. . . .

2,984,088. UNITARY DEHUMIDIFYING AND HEATING APPARATUS FOR USE IN APPLIANCES AND THE LIKE. Kenneth K. Cooper, Utica, N. Y., assignor to General Electric Co.



1. Apparatus for dehumidifying and heating a gaseous fluid comprising: first and second rotatably mounted spaced parallel rigid walls positioned perpendicular to their axis of rotation; means for rotating said walls as a unit; a stationary bearing between said walls having an axis substantially intersecting said axis of rotation at an acute angle midway between said walls; a rigid hollow annular member rotatably mounted on said bearing, said annular member having a first side facing said first wall. . . .

(To Be Continued)

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POSITIONS WANTED

OVERSEAS REPRESENTATIVE. Mature man, 23 years' selling American designed air conditioning and commercial refrigeration. Canadian citizen with full merchandising, managing and technical experience in Canada and United Kingdom. Presently employed, responsible position in this industry. Would consider representing established manufacturer or licensee in Britain for booming expansion in common market. BOX A6842, Air Conditioning, Heating & Refrigeration News.

SALES ENGINEER. 15 years' heavy experience in HVAC field in contracting, engineering and selling. Graduate M.E., P.E. in New York. Desire affiliation with manufacturer as sales engineer or regional representative preferably in New York State or New England. BOX A6844, Air Conditioning, Heating & Refrigeration News.

SALES MANAGER in air conditioning and refrigeration, operated own business 25 years, seeking position with growing concern. Experienced in sales, management, all phases of service, capable of training personnel for field servicing and installation. New York area preferred. BOX A6845, Air Conditioning, Heating & Refrigeration News.

EXPERIENCED 39-year-old executive desires affiliation with progressive company. Record for past 15 years includes volume increases of 3 companies from $350,000 to $3,000,000, $3,000,000 to $8,000,000, $2,000,000 to $5,000,000. Excellent background in both production and engineering in sheet metal and refrigeration manufacturing. BOX A6847, Air Conditioning, Heating & Refrigeration News.

POSITIONS AVAILABLE

EXCEPTIONAL OPPORTUNITY for export air conditioning and refrigeration engineers. Opportunity available for experienced air conditioning and refrigeration sales engineers to become associated with an expanding export department of a leading U. S. manufacturer. Positions available in Beirut, Hong Kong and Mexico City. Qualified applicants must be bilingual and experienced in field application engineering and sales promotion. Excellent company benefits and remuneration plan are provided for the successful applicants. Send fully detailed resume with photograph to DUNHAM-BUSH, INC., 179 South Street, Hartford 10, Conn., U.S.A.

LABORATORY TECHNICIANS — Experienced in the testing of air conditioning equipment for second and third shift operations. Permanent positions with well-established, employee-owned, independent organization serving large industry groups. Good pay plus shift bonus and recognition of responsible personal performance. Send resume to ELECTRICAL TESTING LABORATORIES, INC., New York 21, New York.

MANUFACTURERS' REPRESENTATIVE: to sell dealers and distributors a trouble-free line of automatic ice cube machines. Some choice areas still open. Contact: QUALITY MANUFACTURING CO., P.O. Box 71, Chilton, Wisconsin. Phone 517, giving references, experience, other lines handled, territory covered or desired.

SALES ENGINEER, technical graduate or equivalent with air conditioning and refrigeration experience. Must be interested in calling on refrigeration and air conditioning manufacturers and jobbers. Starting salary based on experience. Write or call Bridgeport Thermostat Division, ROBERTSHAW-FULTON CONTROLS COMPANY, 155 Hill Street, Milford, Connecticut. Phone number TRinity 8-1721, extension 271.

DEALER TRAINING manager — New position established in training program of leading manufacturer of air conditioning equipment. Major responsibility is development of training and promotion activities for package air conditioning and heating salesmen and dealers. Requirements: sales training experience in air conditioning or related field. Prefer BA or BS graduate. Write G. D. Bump, Staff Employment, THE TRANE COMPANY, La Crosse, Wisconsin.

SALES ENGINEER, technical graduate or equivalent with refrigeration and sales experience. Age 23 to 36. Interesting work calling on contractors, wholesalers and air conditioning and refrigeration manufacturers in established territories for a nationally known control manufacturer. Starting salary based on experience. Replies should contain complete resume of education and experience. All replies will be kept confidential. BOX A6829, Air Conditioning, Heating & Refrigeration News.

WHOLESALE SALESMAN — Carrier distributor, exclusively wholesale, in northern Ohio requires an experienced salesman qualified to sell a broad line of applied, packaged and residential equipment in a Metropolitan territory with substantial sales volume. Compensation includes salary and overwrite. Submit complete resume, BOX A6830, Air Conditioning, Heating & Refrigeration News.

SALES ENGINEER — Major national brand air conditioning manufacturer has pending opening for full line sales representative in Arizona/New Mexico market. Proven sales experience with furnaces, packaged cooling, heat pumps and field assembled equipment mandatory. Attractive base salary, bonus, and expenses with real future opportunity. Send brief resume to WESTINGHOUSE ELECTRIC CORP., Air Conditioning Div., 1515 S. Garfield Ave., Los Angeles 22, Calif.

REFRIGERATION AND air conditioning service man—must have at least five years' experience doing refrigeration service work. Also must be able to do sheet metal layout and fabrication. Only top man wanted. Reply BOX A6841, Air Conditioning, Heating & Refrigeration News.

PROJECT AND design engineers for both research and development engineering. Must have creative, inquiring minds with experience in mechanical and electromechanical devices and controls for air conditioning, refrigeration, heat pumps and white goods appliances. Medium size, well established company in Midwest. Send complete resumes. BOX A6843, Air Conditioning, Heating & Refrigeration News.

EQUIPMENT WANTED

WANTED — WATER cooled packaged air conditioners, fifteen 7½ tons, fifteen 5 tons, three 3 tons; any make, model or year, but must be new and carry five year warranty on compressor; quote lowest possible prices and enclose specification sheets for quick, cash sale. BOX A6836, Air Conditioning, Heating & Refrigeration News.

WANTED — USED in good condition with or without compressors, ½ to 1 ton 110v air conditioners, household refrigerators, freezers, and small two-door ice cream freezers. Write BOX A6848, Air Conditioning, Heating & Refrigeration News.

EQUIPMENT FOR SALE

NEW HEATING controls, valves and accessories. Minneapolis - Honeywell, White Rodgers, G-E, General Controls. Special close-out prices. Send for detailed listing. DE LOTT SUPPLY CO., 1600 S. Dearborn Street, Chicago 16, Illinois.

SEALED SYSTEMS wiring simplified —First factual condensation of basic compressor electrical circuitry in five fundamental diagrams on one big wall chart. Covers virtually all sealed systems wiring essentials of single phase air conditioner, refrigerator, freezer or remote commercial units manufactured in United States. $1.69 or 4 for $5.75 postpaid. FRIGID EQUIPMENT CO., Dept. AH&RN, 1340 St. Stephens Road, Mobile, Alabama.

ATTENTION REFRIGERATION Servicemen. Send for catalog listing values in refrigeration and air conditioning parts, relays, capacitors, compressors. Savings up to 50%. WALTER W. STARR, 2833 Lincoln Ave., Chicago 13, Illinois.

10 H.P. water-cooled Brunner condensing unit with extra set of valve plates, compressor model R-5000. McQuay ceiling coil, model L5-2. McQuay freeze tunnel model X-3. All in excellent condition for $999. JACK TIDERINGTON, P. O. Box 563, McMinnville, Oregon. Phone 6871.

BUSINESS OPPORTUNITIES

FOR SALE — Air conditioning heating company, specializing in commercial installations, 21 years' profitable operation under original ownership. Ill health only reason for selling! Land, buildings, trained staff all part of deal. Take over and operate. For details, contact Rod Quick, MacCALLUM HAMMOND QUICK REALTY, INC., 235 B Commercial Boulevard, Lauderdale-by-the-Sea, Florida.

DISTRIBUTORS WANTED for heavy gauge vinyl air conditioner covers. Fits all units up to one ton. Send $2.50 for sample to STORM PRODUCTS, 41 Greenwich Street, Hempstead, L.I., New York.

MISCELLANEOUS

"CRAMMING" for an operating engineer's license? You'll find help, as many thousands have done, in S. L. Potts' "Refrigeration Engineer's Manual." Price only $3. See your wholesaler or order from BUSINESS NEWS PUBLISHING CO., Dept. B, 450 W. Fort, Detroit 26, Mich.

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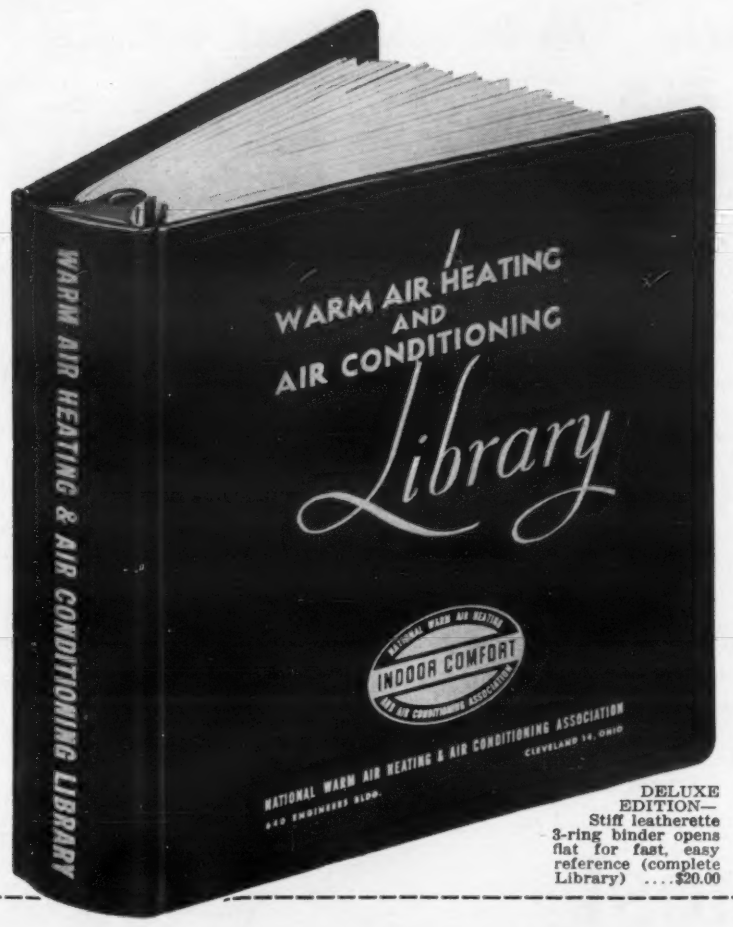
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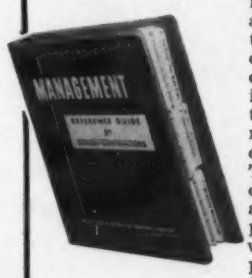

EXPERT technical knowledge is indeed required by the air conditioning and heating dealer, but unless he also knows how to manage his business, he probably won't make a decent profit today. This new book shows you exactly what has to be done, and even more important, how to do it. It represents the combined thinking and efforts of many manufacturers, wholesalers, and, of course, dealer-contractors. The methods and suggestions offered in this book are based on actual experiences that have produced profits for others. They will do the same for you. Prepared in loose-leaf binder form for your convenience, the Management Guide consists of 120 pages, 8½ x 11, with 96 illustrations. $18.

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AIR CONDITIONING HEATING & REFRIGERATION NEWS
The Newspaper of the Industry

NLRB Changes--

(Continued from Page 1, Col. 5)

tion extending far beyond the employer's right of replacement" of economic strikers to carry on his business.

The board added that it is in direct conflict with the express provisions of the National Labor Relations Act prohibiting discrimination.

In the particular case involved, the Erie Resistor Corp., manufacturer of electronic components and custom-molded plastics, granted 20 years' seniority to new employes hired as strike replacements and 20 years' additional seniority to laid off employes and strikers who returned to work.

In the course of economic layoffs which followed, many strikers who had not been replaced and who had been recalled at the end of the strike were among the first to lose their jobs solely as a result of the superseniority plan.

The International Union of Electrical Workers filed unfair practices against the company.

In issuing its decision, the NLRB overruled the trial examiner who recommended dismissal of the complaint.

The handbill decision revolved around whether or not Congress meant a proviso (which permits publicity other than picketing) to the secondary boycott prohibitions of the Act to apply only in situations where the employer being struck is a manufacturer or whether it could apply where the dispute is with other types of businesses.

The majority of the board believed that it was not to be restricted to manufacturers. Board member Philip Ray Rodgers thought otherwise.

The decision involving the supervisor came in response to a request by the U. S. Court of Appeals for the board to reconsider its original decision, in respect to one supervisor involved, that a Detroit plumbing contractors association and a number of individual employers interfered with the internal affairs of United Association Local 636 by permitting supervisors to hold union office, vote in union elections, and engage in negotiations with the employer association on behalf of the union.

The board held that this particular individual was not a transitory supervisor who might be a foreman one week and a journeyman the next. He had been employed only as a supervisor for the last four years and was of such rank that he reported directly to the president of the company.

Honeywell Names Dr. John N. Dempsey

MINNEAPOLIS—Dr. John N. Dempsey has been named by Minneapolis-Honeywell as director of its Research Center and associate director of the company's over-all research.

As director of the Research Center, Dr. Dempsey succeeds Dr. Van W. Bearinger, who has been appointed general manager of Honeywell's Semiconductor division. Dr. Bearinger also was director of research for the firm.

Dr. Dempsey, 38, has been assistant director of the Center.

Lewin-Mathes Increases Prices On Copper Water Tube by 7½%

ST. LOUIS — The Lewin-Mathes Co., division of Cerro Corp., announced it would increase the price of copper water tube by 7½%, effective with the opening of business Aug. 24, 1961.

ACTION EXPLAINED

In explaining the action, a company spokesman said: "In spite of stringent cost reduction measures undertaken by Lewin-Mathes, existing price levels do not return a margin of profit on copper water tube."

Lewin-Mathes pointed out that the differential between the domestic price of electrolytic copper and the price at which it sells copper water tube has declined sharply during the first six months of 1961.

In June of this year, this differential was approximately 11 cents per pound less than the average spread realized by the division over the five-year period, 1956 through 1960. On top of the squeeze between the prices of raw material and finished product has come a series of increases in labor and other fabricating costs, it was pointed out.

The company said this increase applies solely to types K, L, and M copper water tube in both straight lengths and coils and that other categories of copper and brass tube and pipe are not affected. The differential between types K and L in straight lengths and coils established on July 6, 1961, will be maintained.

Air Diffusion Council Organized--

(Continued from Page 1, Col. 5)

office stated, and reports will be issued as this project progresses.

In addition to establishing this standard, the council also plans to launch an educational program to increase knowledge of the science of air distribution among all individuals involved in specification, purchase, installation, and utilization of air distribution equipment.

Charter members of the council are:

Anemostat Corp. of America, Buensod-Stacey, Carnes Corp., Connor Engineering Corp., Titus Mfg. Co., Tuttle & Bailey Div. of Allied Thermal Corp., and Waterloo Register Co.

Officers elected at the first meeting, to serve during 1961-62, are: R. D. Tutt, Tuttle & Bailey, president; P. F. Canavan, Connor Engineering, vice president; D. Titus, Titus Mfg., secretary; and C. T. Roff, Anemostat Corp. of America, treasurer.

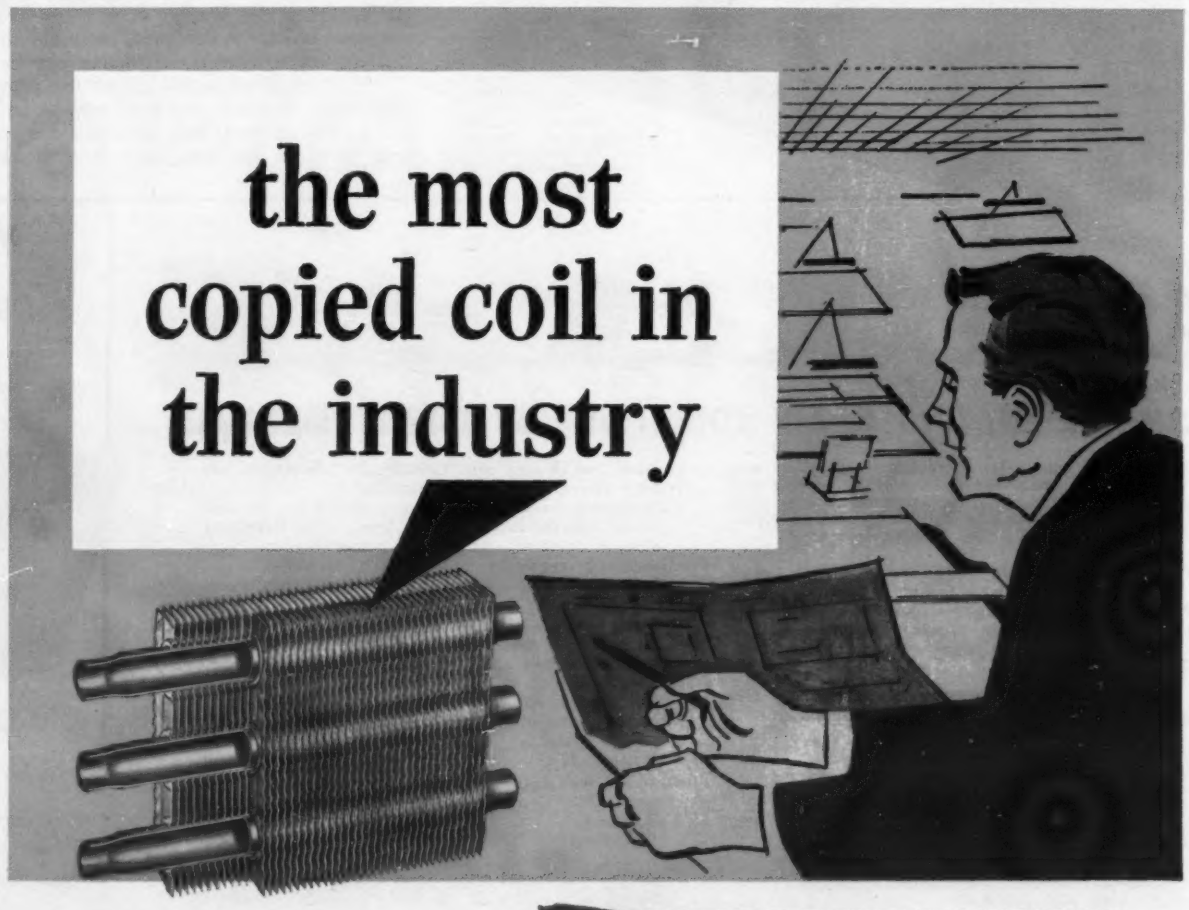
Air Diffusion Council is managed by Smith, Bucklin & Associates, professional trade association management firm. Address of the council is 333 N. Michigan Ave., Chicago 1, Ill.

Bundy Names Richards To Head 9-Mi. Rd. Plant

DETROIT—Edward Richards has been appointed manager of Bundy Tubing Co.'s Nine Mile Rd. plant in suburban Warren, it was announced by Wendell W. Anderson, Jr., president.

Richards was formerly a plant manager with Clevite Harris Products, Napoleon, Ohio.

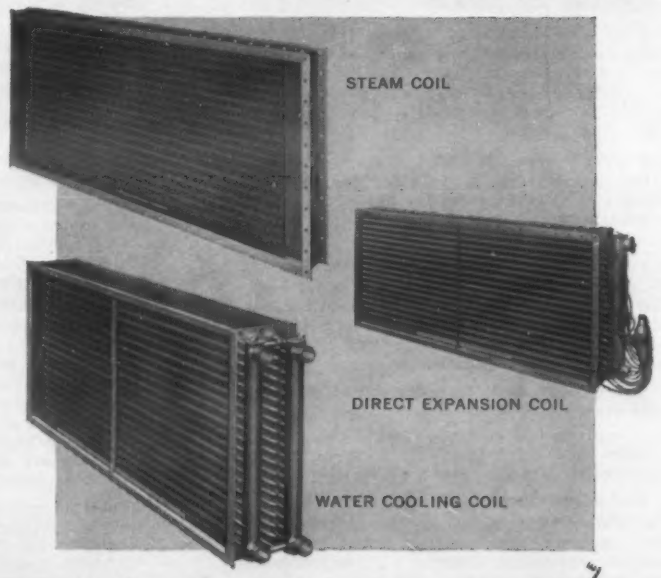
the most copied coil in the industry



Over the years, McQuay coils have stood the important test of time, and have justly earned their reputation for quality and performance. No wonder, then, that they are the most copied coils in the industry.

McQuay was the first to produce a permanent Ripple-Fin-to-tube bond without the use of solder. McQuay was first with Ripple-Fins, first to combine Ripple-Fins and staggered tube construction for maximum heat transfer, greater strength and rigidity. McQuay, also, was first to add full fin collars to its Ripple-Fin construction for accurate fin spacing and maximum heat transfer.

McQuay coils are available in the widest possible range of styles and capacities and are available for steam, hot water, chilled water, direct expansion, refrigerant condensing and all types of brine. For any coil requirement, call your McQuay representative, or write McQuay, Inc., 1607 Broadway Street N. E., Minneapolis 13, Minnesota.



Tube diameters ⅝"—½"—⅜"
One to 12 rows deep—One to 15 fins per inch

McQuay Means Quality

McQuay INC.
AIR CONDITIONING • HEATING • REFRIGERATION